

=> FILE REG

FILE 'REGISTRY' ENTERED AT 15:26:05 ON 22 AUG 2008  
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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=> DISPLAY HISTORY FULL L1-

FILE 'HCA' ENTERED AT 14:54:25 ON 22 AUG 2008

L1 79562 SEA DENDRI? OR DENDRON?  
L2 18673 SEA (BRANCH? OR BRUSH? OR COMB OR COMBS OR COMBED OR  
COMBING# OR STAR OR STARS OR STARRED OR STARRING# OR  
STARBURST?)(2A)(POLYM? OR COPOLYM? OR HOMOPOLYM? OR  
TERPOLYM? OR RESIN? OR GUM#)  
L3 35 SEA L1(3A)(ALKOXYLAT? OR ETHOXYLAT? OR PROPOXYLAT?)  
L4 27 SEA L2(3A)(ALKOXYLAT? OR ETHOXYLAT? OR PROPOXYLAT?)

FILE 'HCAPLUS' ENTERED AT 14:56:02 ON 22 AUG 2008

L5 570 SEA LEINWEBER ?/AU  
L6 270 SEA FEUSTEL ?/AU  
L7 126 SEA WASMUND ?/AU  
L8 1936 SEA RAUSCH ?/AU  
L9 0 SEA L5 AND L6 AND L7 AND L8  
L10 12 SEA L5 AND L6  
L11 6 SEA L5 AND L7  
L12 0 SEA L5 AND L8  
L13 3 SEA L6 AND L7  
L14 1 SEA L6 AND L8  
L15 0 SEA L7 AND L8  
L16 1 SEA ((L10 OR L11 OR L12 OR L13 OR L14 OR L15)) AND L1  
SEL RN

FILE 'REGISTRY' ENTERED AT 14:57:29 ON 22 AUG 2008

L17 45 SEA (115-77-5/BI OR 50-70-4/BI OR 77-99-6/BI OR 10097-02-  
L18 4 SEA L17 AND PMS/CI  
L19 40 SEA L17 AND C H O/ELF  
L20 24 SEA L17 AND (?DIOL OR ?TRIOLETHANOL OR ?TETROLETHANOL OR  
?GLYCOL OR ?ITOL OR ?CEROL)/CNS  
L21 16 SEA L19 NOT L20  
ACT POLYOLS/A  
-----  
L22 ( 16)SEA (GLYCEROL OR DIGLYCEROL OR TRIGLYCEROL OR TETRAGLYCER  
OL OR PENTAGLYCEROL OR HEXAGLYCEROL OR TRIMETHYLOLMETHANE  
OR TRIMETHYLOLETHANE OR TRIMETHYLOLPROPANE OR PENTAERYTH  
RITOL OR DIPENTAERYTHRITOL OR TRIPENTAERYTHRITOL OR

L23 (           SORBITOL OR INOSITOL)/CN  
       1)SEA 7426-71-3  
 L24       17 SEA L23 OR L22  
           -----  
 L25       33 SEA L20 OR L24  
 L26       29 SEA L25 NOT L18  
 L27       17 SEA L17 AND ACID#  
 L28       15 SEA L27 AND C H O/ELF  
 L29       15 SEA L28 NOT L18  
 L30        9 SEA L29 NOT ANHYDRIDE#  
 L31        7 SEA L30 NOT L26

FILE 'HCA' ENTERED AT 15:10:57 ON 22 AUG 2008  
 L32       430 SEA (L26/D OR L26/DP) (L) (ALKOXYLAT? OR ETHOXYLAT? OR  
           PROPOXYLAT?)  
 L33       137 SEA (L31/D OR L31/DP) (L) (ALKOXYLAT? OR ETHOXYLAT? OR  
           PROPOXYLAT?)  
 L34        9 SEA L32 AND L1  
 L35        4 SEA L32 AND L2  
 L36        1 SEA L33 AND L1  
 L37        0 SEA L33 AND L2  
 L38       141447 SEA L26  
 L39       43883 SEA L31  
 L40       3893 SEA L38 AND L39  
 L41        40 SEA L40 AND L1  
 L42        36 SEA L40 AND L2

FILE 'REGISTRY' ENTERED AT 15:13:15 ON 22 AUG 2008  
           E ETHYLENE OXIDE/CN  
 L43        1 SEA "ETHYLENE OXIDE"/CN  
           E PROPYLENE OXIDE/CN  
 L44        1 SEA "PROPYLENE OXIDE"/CN

FILE 'HCA' ENTERED AT 15:13:43 ON 22 AUG 2008  
 L45       30876 SEA L43 OR L44  
 L46       59446 SEA ALKOXYLAT? OR ETHOXYLAT? OR PROPOXYLAT?  
 L47       10 SEA L41 AND (L45 OR L46)  
 L48        4 SEA L42 AND (L45 OR L46)  
 L49        7 SEA (L3 OR L4) AND L38  
 L50        2 SEA (L3 OR L4) AND L39  
 L51       31 SEA (L3 OR L4) AND ACID#  
 L52       89127 SEA POLYOL# OR POLYHYDRIC? OR POLYALCOHOL## OR POLYALC#  
           OR POLYGLYCOL#  
 L53       10 SEA (L3 OR L4) AND L52  
 L54        7 SEA L51 AND L53

FILE 'REGISTRY' ENTERED AT 15:18:25 ON 22 AUG 2008

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                SEL L26 1-29 RN
                EDIT E1-E29 /BI /CRN
L55             62957 SEA (115-77-5/CRN OR 126-30-7/CRN OR 126-58-9/CRN OR
                D L43 RN
L56             32082 SEA 75-21-8/CRN
                D L44 RN
L57             22688 SEA 75-56-9/CRN
L58             6811 SEA L55 AND (L56 OR L57)
L59             6095 SEA L55 AND L56
L60             6107 SEA L55 AND L57
L61             5391 SEA L55 AND L56 AND L57
L62             27 SEA (L59 OR L60) AND 2/NC
L63             77 SEA L61 AND 3/NC

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FILE 'HCA' ENTERED AT 15:21:10 ON 22 AUG 2008

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L64             2672 SEA L62 OR L63
L65             17 SEA L64 AND L1
L66             25 SEA L64 AND L2
L67             1 SEA L64 AND L3
L68             2 SEA L64 AND L4
L69             15 SEA (L65 OR L66) AND L46
L70             9 SEA (L65 OR L66) AND L52
L71             41 SEA L34 OR L35 OR L36 OR L47 OR L48 OR L49 OR L50 OR L54
                OR L67 OR L68 OR L69 OR L70
L72             16 SEA (L65 OR L66) NOT L71
L73             33 SEA 1840-2003/PY,PRY,AY AND L71
L74             10 SEA 1840-2003/PY,PRY,AY AND L72
L75             970 S L1(3A)(POLYESTER# OR POLY(A)ESTER#)
L76             50 S L75 AND L46
L77             91410 S DEMULS? OR OIL#(2A)(WATER# OR HOH OR H2O OR AQ# OR AQUE
L78             331635 S PETROLEUM# OR CRUDE#(2A)OIL#
L79             2 S L76 AND (L77 OR L78)
L80             1 S L79 NOT (L73 OR L74)
L81             0 S 1840-2003/PY,PRY,AY AND L80
L82             104 S (L1 OR L2) AND (L46 OR L45) AND (L52 OR L38)
L83             9 S L82 AND (L77 OR L78)
L84             7 S L83 NOT (L73 OR L74)
L85             3 S 1840-2003/PY,PRY,AY AND L84

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=> FILE HCA

FILE 'HCA' ENTERED AT 15:26:15 ON 22 AUG 2008

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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=> D L73 1-33 BIB ABS HITSTR HITIND

L73 ANSWER 1 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 143:48172 HCA Full-text

TI Branched highly-functional monomers exhibiting low polymerization shrinkage for dental composites

IN Arthur, Samuel David; Brandenburg, Charles J.

PA USA

SO U.S. Pat. Appl. Publ., 14 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20050124722	A1	20050609	US 2004-937706	20040908

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WO 2005055960	A2	20050623	WO 2004-US40625	20041202
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WO 2005055960 A3 20080124

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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, AP, EA, EP, OA

PRAI US 2003-526820P P 20031203 <--

OS MARPAT 143:48172

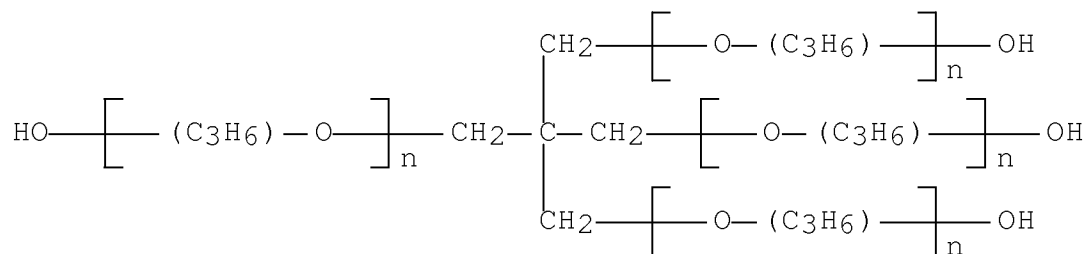
AB The invention relates to (i) (meth)acrylate monomers derived from polyfunctional nucleus mols.; (ii) a dental composite material wherein (meth)acrylate monomers are utilized to reduce shrinkage upon polymn.; (iii) a method for producing dental restoration articles with reduced shrinkage; and (iv) various dental restorative articles

comprising these (meth)acrylate monomers. A dental composite material comprises about 1 to 99 wt.% of a (meth)acrylic acid ester compd., about 0.1 to 5 wt.% of a polymn. initiator, about 20 to 90 wt.% of an inorg. filler, and about 1 to 100 wt.% of a branched (meth)acrylate monomer compd. The dental composite material further comprises at least one of a photoinitiating accelerator, an activator, a pigment, a radiopaquing agent, a stabilizer, and an antioxidant. Thus, a mixt. of 7.5 g pentaerythritol propoxylate (n=2) tetramethacrylate (PPOMA, n=2; prepn. given) and 0.15 g phenylbis(2,4,6- trimethylbenzoyl)phosphine oxide in 0.5 mL dichloromethane was combined to yield a PPOMA/photoinitiator masterbatch. A mixt. of 1.50 g PPOMA/photoinitiator masterbatch and 1.50 g Bis-GMA was blended with 0.50 g Degussa OX-50 fumed silica and 7.0 g Schott 8235 UF1.5 silanized glass powder and degassed. This compn. contained 28.6 wt.% resin, 4.8 wt.% fumed silica, and 66.6 wt.% glass. The resin-glass blend was molded and cured into bars for phys. testing. The use of branched, low-viscosity, high-equiv. wt. pentaerythritol propoxylate methacrylate as diluent monomer significantly reduced polymn. shrinkage by 50% relative to the TEGDMA control compn., without significantly reducing mech. properties.

IT 9051-49-4, Pentaerythritol propoxylate  
(branched highly-functional (meth)acrylate diluent monomers with low polymn. shrinkage for dental composites)

RN 9051-49-4 HCA

CN Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (CA INDEX NAME)



IC ICM A61F002-00

ICS C07C069-74

INCL 523115000; 560001000

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 37

IT Contraction (mechanical)

(polymn.; branched highly-functional

(meth)acrylate diluent monomers with low polymn. shrinkage for dental composites)

IT Dental materials and appliances  
(resins; branched highly-functional (meth)acrylate diluent monomers with low polymn. shrinkage for dental composites)

IT Polymerization  
(shrinkage; branched highly-functional (meth)acrylate diluent monomers with low polymn. shrinkage for dental composites)

IT 760-93-0, Methacrylic anhydride 9051-49-4, Pentaerythritol propoxylate 42503-45-7, Pentaerythritol ethoxylate (branched highly-functional (meth)acrylate diluent monomers with low polymn. shrinkage for dental composites)

IT 79-10-7DP, Acrylic acid, esters, polymers 79-41-4DP, Methacrylic acid, esters, polymers 117223-63-9P 853053-99-3P  
(branched highly-functional (meth)acrylate diluent monomers with low polymn. shrinkage for dental composites)

L73 ANSWER 2 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 142:159197 HCA Full-text

TI Sorbitol esters-ethoxylated nonylphenol-polyoxyalkylene decyl ether emulsifiers for water-in-oil diesel fuel emulsions

IN Cho, Seong Ho; Kim, Gi Seon; Kim, Jong Deuk; Lim, Dae Jae; Lim, Gyeong Sik; Song, Myeong Geun

PA In-Chon Energy Corp., S. Korea

SO Repub. Korean Kongkae Taeho Kongbo, No pp. given  
CODEN: KRXXA7

DT Patent

LA Korean

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	
PI	KR 2003020006	A	20030308	KR 2001-52257	20010828

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PRAI KR 2001-52257 20010828 <--

AB Water-in-oil diesel fuel emulsions with excellent phase stability contain a dispersant-emulsifier consisting of sorbitol ester 70-85, ethoxylated nonylphenol 10-27, and ethylene oxide-propylene oxide copolymer branched decyl ether 3-10 wt.%. The sorbitol esters are selected from sorbitol palmitate, sorbitan stearate, and sorbitan trioleate.

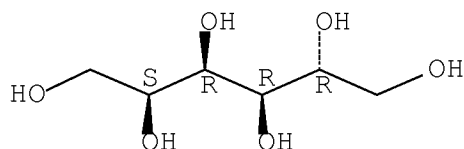
IT 50-70-4D, D-Glucitol, esters

(emulsifiers contg.; sorbitol esters-ethoxylated  
nonylphenol-polyoxyalkylene decyl ether emulsifiers for  
water-in-oil diesel fuel emulsions)

RN 50-70-4 HCA

CN D-Glucitol (CA INDEX NAME)

Absolute stereochemistry.



IC ICM C10L001-32

CC 51-9 (Fossil Fuels, Derivatives, and Related Products)

IT 50-70-4D, D-Glucitol, esters 1338-43-8 9016-45-9  
26266-57-9 26266-58-0 56451-84-4, Sorbitan stearate  
155683-77-5

(emulsifiers contg.; sorbitol esters-ethoxylated  
nonylphenol-polyoxyalkylene decyl ether emulsifiers for  
water-in-oil diesel fuel emulsions)

L73 ANSWER 3 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 142:24281 HCA Full-text

TI Alkoxyated dendrimers and their use as  
biodegradable demulsifiers

IN Leinweber, Dirk; Feustel, Michael; Wasmund, Elisabeth; Grundner,  
Heidi

PA Clariant G.m.b.H., Germany

SO Ger., 9 pp.  
CODEN: GWXXAW

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	DE 10329723	B3	20041202	DE 2003-10329723	200307 02
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	WO 2005003260	A1	20050113	WO 2004-EP6651	200406

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 CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB,  
 GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,  
 KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,  
 MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,  
 SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,  
 VN, YU, ZA, ZM, ZW

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 GW, ML, MR, NE, SN, TD, TG

EP 1646705 A1 20060419 EP 2004-740092

200406  
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EP 1646705 B1 20071219

R: DE, FR, GB, IT, NL

US 20070100002 A1 20070503 US 2005-562097

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NO 2006000132 A 20060109 NO 2006-132

200601  
 09

&lt;--

PRAI DE 2003-10329723 A 20030702 <--

WO 2004-EP6651 W 20040619

AB Use of alkoxyated dendrimers with a mol. wt. from 2400 to 100,000 g/mol, which are alkoxyated with C2-4-alkylene oxide groups or a mixt. of such alkylene oxide groups, so that the alkoxyated dendrimer contains a degree of alkoxylation of 1-100 alkylene oxide units per free OH group, for the sepn. of oil/water emulsions, in quantities of 0.0001-5 wt.%, related to the oil content of the emulsion which can be sepd.

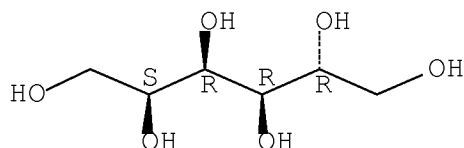
IT 50-70-4, Sorbitol, uses 50-70-4D, Sorbitol, polyglycidyl ethers 56-81-5, Glycerol, uses 69-65-8, Mannitol 77-85-0, Trimethylolpropane 77-99-6, Trimethylolpropane, alkoxyated 88-99-3, Phthalic acid, uses 99-10-5, 3,5-Dihydroxybenzoic acid 110-16-7, 2-Butenedioic acid (2Z)-, uses 115-77-5, uses 115-77-5D, alkoxyated 124-04-9, Adipic acid, uses 126-30-7, Neopentylglycol 126-58-9 2224-15-9 2425-79-8, Butane-1,4-diol diglycidyl



ether 2831-90-5 3126-63-4 3454-29-3,  
 Trimethylolpropanetriglycidyl ether 4767-03-7  
 10097-02-6 10097-03-7 13236-02-7  
 16096-31-4, Hexane-1,6-dioldiglycidyl ether  
 23235-61-2, Bis(trimethylolpropane) 27043-36-3  
 34541-79-2 56090-54-1, Triglycerol  
 59113-36-9, Diglycerin  
 (alkoxylated dendrimers as biodegradable  
 demulsifiers)

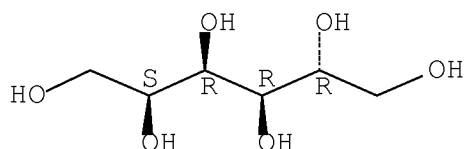
RN 50-70-4 HCA  
 CN D-Glucitol (CA INDEX NAME)

Absolute stereochemistry.

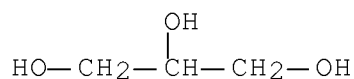


RN 50-70-4 HCA  
 CN D-Glucitol (CA INDEX NAME)

Absolute stereochemistry.



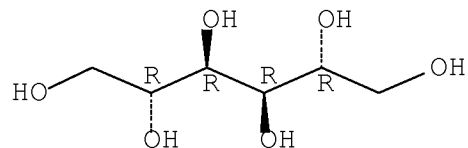
RN 56-81-5 HCA  
 CN 1,2,3-Propanetriol (CA INDEX NAME)



RN 69-65-8 HCA

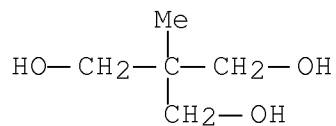
CN D-Mannitol (CA INDEX NAME)

Absolute stereochemistry.



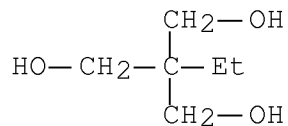
RN 77-85-0 HCA

CN 1,3-Propanediol, 2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



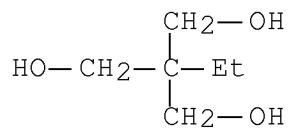
RN 77-99-6 HCA

CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



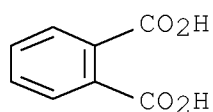
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CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)

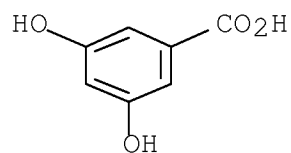


RN 88-99-3 HCA

CN 1,2-Benzenedicarboxylic acid (CA INDEX NAME)

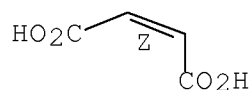


RN 99-10-5 HCA  
 CN Benzoic acid, 3,5-dihydroxy- (CA INDEX NAME)

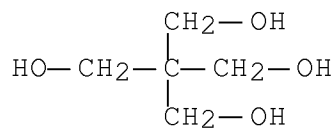


RN 110-16-7 HCA  
 CN 2-Butenedioic acid (2Z)- (CA INDEX NAME)

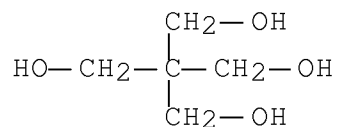
Double bond geometry as shown.



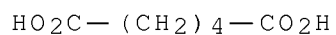
RN 115-77-5 HCA  
 CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



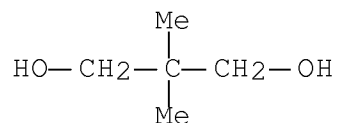
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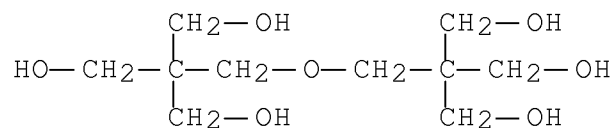
RN 124-04-9 HCA  
CN Hexanedioic acid (CA INDEX NAME)



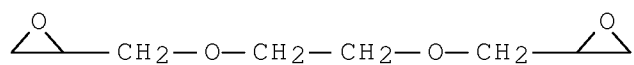
RN 126-30-7 HCA  
CN 1,3-Propanediol, 2,2-dimethyl- (CA INDEX NAME)



RN 126-58-9 HCA  
CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)- (CA INDEX NAME)

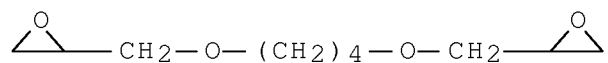


RN 2224-15-9 HCA  
CN Oxirane, 2,2'-[1,2-ethanediylbis(oxyethylene)]bis- (CA INDEX NAME)



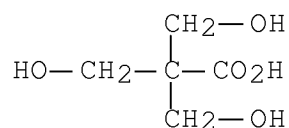
RN 2425-79-8 HCA

CN Oxirane, 2,2'-[1,4-butanediylbis(oxyethylene)]bis- (CA INDEX NAME)



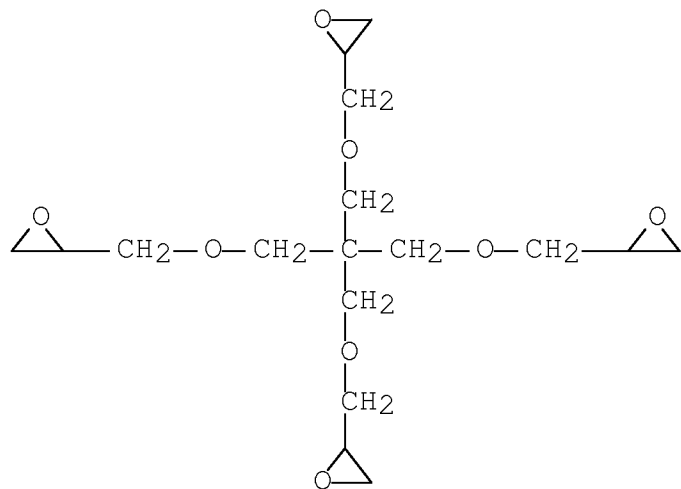
RN 2831-90-5 HCA

CN Propanoic acid, 3-hydroxy-2,2-bis(hydroxymethyl)- (CA INDEX NAME)



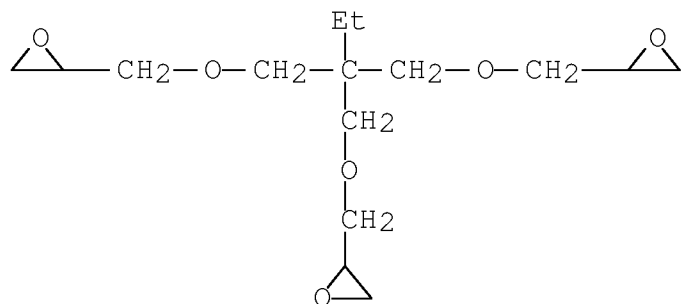
RN 3126-63-4 HCA

CN Oxirane, 2,2'-[[2,2-bis[(2-oxiranylmethoxy)methyl]-1,3-propanediyl]bis(oxyethylene)]bis- (CA INDEX NAME)



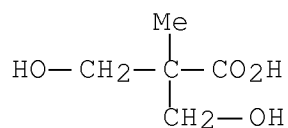
RN 3454-29-3 HCA

CN Oxirane, 2,2'-[[2-ethyl-2-[(2-oxiranylmethoxy)methyl]-1,3-propanediyl]bis(oxyethylene)]bis- (CA INDEX NAME)



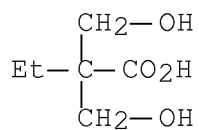
RN 4767-03-7 HCA

CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



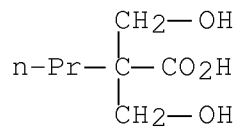
RN 10097-02-6 HCA

CN Butanoic acid, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



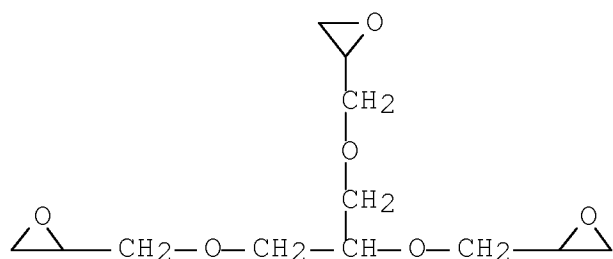
RN 10097-03-7 HCA

CN Pentanoic acid, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)

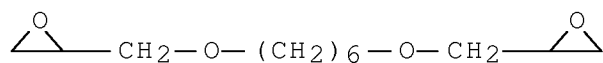


RN 13236-02-7 HCA

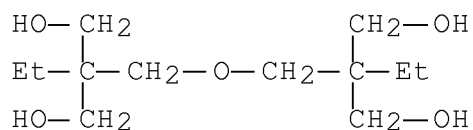
CN Oxirane, 2,2',2''-[1,2,3-propanetriyltris(oxymethylene)]tris- (CA INDEX NAME)



RN 16096-31-4 HCA  
CN Oxirane, 2,2'-[1,6-hexanediylbis(oxymethylene)]bis- (CA INDEX NAME)



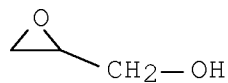
RN 23235-61-2 HCA  
CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-ethyl- (CA INDEX NAME)



RN 27043-36-3 HCA  
CN Propanol, 1,3(or 2,3)-bis(2-oxiranylmethoxy)- (CA INDEX NAME)

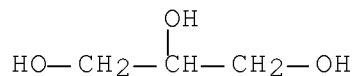
CM 1

CRN 556-52-5  
CMF C3 H6 O2

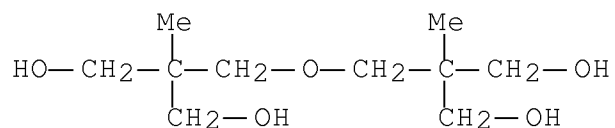


CM 2

CRN 56-81-5  
CMF C3 H8 O3



RN 34541-79-2 HCA  
CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-methyl- (CA INDEX  
NAME)



RN 56090-54-1 HCA  
CN Triglycerol (CA INDEX NAME)  
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
RN 59113-36-9 HCA  
CN Propanediol, oxybis- (CA INDEX NAME)  
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
IC ICM B01D017-05  
CC 38-3 (Plastics Fabrication and Uses)  
Section cross-reference(s): 51  
ST alkoxyated dendrimer biodegradable demulsifier  
petroleum prodn  
IT Petroleum, preparation  
(alkoxyated dendrimers as biodegradable  
demulsifiers)  
IT Polyesters, uses  
(alkoxyated dendrimers as biodegradable  
demulsifiers)  
IT Dendritic polymers  
(alkoxyated; alkoxyated dendrimers



as biodegradable demulsifiers)

IT Petroleum refining  
(emulsion breaking, agents; alkoxyated dendrimers as biodegradable demulsifiers)

IT Soybean oil  
(epoxidized; alkoxyated dendrimers as biodegradable demulsifiers)

IT Dendritic polymers  
(reaction products; alkoxyated dendrimers as biodegradable demulsifiers)

IT Castor oil  
(triglycidyl ethers; alkoxyated dendrimers as biodegradable demulsifiers)

IT 50-70-4, Sorbitol, uses 50-70-4D, Sorbitol, polyglycidyl ethers 56-81-5, Glycerol, uses 69-65-8, Mannitol 77-85-0, Trimethylolpropane 77-99-6, Trimethylolpropane 77-99-6D, Trimethylolpropane, alkoxyated 78-62-6, Diethoxydimethylsilane 85-44-9, Phthalic anhydride 88-99-3, Phthalic acid, uses 89-32-7, Pyromellitic anhydride 99-10-5, 3,5-Dihydroxybenzoic acid 101-68-8, Diphenylmethanediisocyanate 101-90-6 108-30-5, Succinic anhydride, uses 108-31-6, Maleic anhydride, uses 110-16-7, 2-Butenedioic acid (2Z)-, uses 115-77-5, uses 115-77-5D, alkoxyated 124-04-9, Adipic acid, uses 126-30-7, Neopentylglycol 126-58-9 552-30-7, Trimellitic anhydride 1112-39-6, Dimethoxydimethylsilane 1675-54-3 2224-15-9 2425-79-8, Butane-1,4-diol diglycidyl ether 2561-85-5, Dodecylsuccinic anhydride 2831-90-5 3126-63-4 3454-29-3, Trimethylolpropanetriglycidyl ether 4767-03-7 10097-02-6 10097-03-7 13236-02-7 16096-31-4, Hexane-1,6-dioldiglycidyl ether 23235-61-2, Bis(trimethylolpropane) 25618-55-7, Polyglycerol 26142-30-3 26471-62-5 27043-36-3 28109-53-7D, [1,1'-Biphenyl]-ar,ar'-diamine, tetraglycidyl ether 34541-79-2 37237-76-6 56090-54-1, Triglycerol 59113-36-9, Diglycerin 67938-13-0 121630-71-5 (alkoxyated dendrimers as biodegradable demulsifiers)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 4 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 140:344912 HCA Full-text

TI Implantation of encapsulated biological materials for treating diseases such as diabetes.

IN Scharp, David; Latta, Paul; Yu, Xiaojie; Yue, Chengyun; Hubbell,

Jeffery  
 PA Novocell, Inc., USA  
 SO PCT Int. Appl., 96 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2004032881	A2	20040422	WO 2003-US32842	20031014

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WO 2004032881      A3      20040902  
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 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA	2501949	A1	20040422	CA 2003-2501949	20031014
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AU	2003285887	A1	20040504	AU 2003-285887	20031014
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US	20040136971	A1	20040715	US 2003-684859	20031014
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EP	1553893	A2	20050720	EP 2003-779114	20031014
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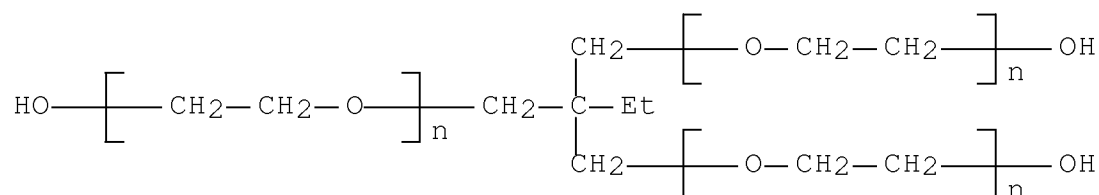
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 BR 2003015130      A      20050816      BR 2003-15130

					200310 14
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CN	1703175	A	20051130	CN 2003-80101267	200310 14
				<--	
JP	2006503080	T	20060126	JP 2004-543792	200310 14
				<--	
MX	2005PA03829	A	20051005	MX 2005-PA3829	200504 11
				<--	
ZA	2005003534	A	20060830	ZA 2005-3534	200505 04
				<--	
IN	2005KN00857	A	20080215	IN 2005-KN857	200505 11
				<--	
PRAI	US 2002-419015P	P	20021011	<--	
	US 2003-684859	A	20031014	<--	
	WO 2003-US32842	W	20031014	<--	
AB	<p>The present invention relates to compns. for treating a disease, such as diabetes, by implanting encapsulated biol. material into a patient in need of treatment. Several methods are presented for coating several different types of biol. materials. The coatings can be placed directly onto the surface of the biol. materials or onto the surface of other coating materials that hold the biol. materials. The components of the polymn. reactions that produce the coatings can include natural and synthetic polymers, macromers, accelerants, cocatalysts, photoinitiators, and radiation. These encapsulated biol. materials are used to treat a variety of different human and animal diseases or disorders by implanting them into several areas in the body including the s.c. site. The coating materials can be manipulated to provide different degrees of biocompatibility, protein diffusivity characteristics, strength, and biodegradability to optimize the delivery of biol. materials from the encapsulated implant to the host recipient while protecting the encapsulated biol. materials from destruction by the host inflammatory and immune protective mechanisms without requiring long-term anti-inflammatory or anti-immune treatment of the host. Examples are given for isolating islet cells in mice and primates and the prepn. of a dendrimer- eosin Y conjugate for coating the cells.</p>				

IT 50586-59-9, Ethoxylated trimethylolpropane  
 (implantation of encapsulated biol. materials for treating  
 diseases such as diabetes)

RN 50586-59-9 HCA

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with  
 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



IC ICM A61K

CC 63-6 (Pharmaceuticals)

IT Polyamines  
 (polyamide-, dendrimers; implantation of encapsulated  
 biol. materials for treating diseases such as diabetes)

IT Dendritic polymers  
 (polyamide-polyamines; implantation of encapsulated biol.  
 materials for treating diseases such as diabetes)

IT Polyamides, biological studies  
 (polyamine-, dendrimers; implantation of encapsulated  
 biol. materials for treating diseases such as diabetes)

IT 26937-01-9DP, Pamam, conjugates with 5(6)-carboxyeosin  
 (dendritic; implantation of encapsulated biol.  
 materials for treating diseases such as diabetes)

IT 56-87-1, L-Lysine, uses 70-26-8, L-Ornithine 71-00-1,  
 L-Histidine, uses 74-79-3, L-Arginine, uses 79-10-7, Acrylic  
 acid, uses 88-12-0, uses 100-69-6, 2-Vinylpyridine 102-71-6,  
 Triethanolamine, uses 103-49-1, Dibenzylamine 103-83-3,  
 N,N-Dimethylbenzylamine 104-63-2, N-Benzylethanolamine 105-59-9,  
 N-Methyldiethanolamine 109-56-8, N-Isopropylethanolamine  
 110-18-9 121-44-8, Triethylamine, uses 141-43-5, Ethanolamine,  
 uses 818-61-1, 2-Hydroxyethyl acrylate 1072-63-5,  
 1-Vinylimidazole 2235-00-9, N-Vinylcaprolactam 7727-21-1,  
 Potassium persulfate 25322-68-3, Peg 26828-48-8,  
 2-Allyl-2-methyl-1,3-cyclopentanedione 28961-43-5,  
 Ethoxylated trimethylolpropane triacrylate  
 50586-59-9, Ethoxylated trimethylolpropane  
 680993-48-0  
 (implantation of encapsulated biol. materials for treating  
 diseases such as diabetes)

IT 132201-84-4DP, conjugates with PAMAM dendrimer  
(implantation of encapsulated biol. materials for treating  
diseases such as diabetes)

L73 ANSWER 5 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 140:254086 HCA Full-text

TI Procedure for the production hyperbranched, water-thinnable  
polyesters

IN Stumbe, Jean-Francois; Bruchmann, Bernd; Haering, Dietmar

PA BASF A.-G., Germany

SO Ger. Offen., 13 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	DE 10240817	A1	20040311	DE 2002-10240817	200208 30
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	WO 2004020503	A1	20040311	WO 2003-EP8088	200307 24
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RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU	2003254580	A1	20040319	AU 2003-254580	200307 24
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EP	1537166	A1	20050608	EP 2003-790809	200307 24
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PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK  
 JP 2005536608 T 20051202 JP 2004-531812

200307  
24

US 20050250914 A1 20051110 US 2005-525752

200502  
25

US 7148293 B2 20061212  
 US 20070293634 A1 20071220 US 2007-585807

200701  
16

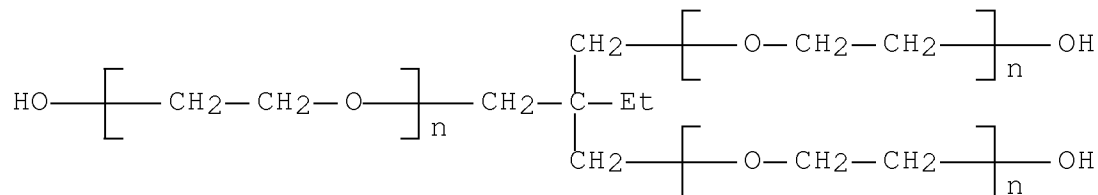
PRAI DE 2002-10240817 A 20020830 <--  
 WO 2003-EP8088 W 20030724 <--  
 US 2005-525752 A3 20050225

AB Uncrosslinked, hyperbranched, water-sol. or water-dispersible polyesters, useful for inks, adhesives and coatings, are manufd. by polymn. of  $\geq 1$  dicarboxylic acid with  $\geq 1$  polyether polyol having  $\geq 3$  OH groups such as polyglycerol in the presence of catalysts at 40-160° and diacid- polyol ratio such that the mol. ratio of the OH and CO<sub>2</sub>H groups is (1-2):(1-2).

IT 50586-59-9P, Ethoxylated trimethylolpropane  
 (Lupranol VP 9266; prodn. of hyperbranched, water-thinnable, uncrosslinked polyesters for polyether polyols)

RN 50586-59-9 HCA

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



IC ICM C08G063-78

ICS C08G063-82

CC 35-5 (Chemistry of Synthetic High Polymers)

IT Dendritic polymers

(hyperbranched; prodn. of hyperbranched, water-thinnable, uncrosslinked polyesters for polyether polyols for lacquers)

IT Polyethers, preparation  
Polyoxyalkylenes, preparation  
(polyester-, hyperbranched; prodn. of hyperbranched, water-thinnable, uncrosslinked polyesters for polyether polyols)

IT Polyesters, preparation  
(polyether-, hyperbranched; prodn. of hyperbranched, water-thinnable, uncrosslinked polyesters for polyether polyols)

IT Polyesters, preparation  
(polyoxyalkylene-, hyperbranched; prodn. of hyperbranched, water-thinnable, uncrosslinked polyesters for polyether polyols)

IT Inks  
(printing; prodn. of hyperbranched, water-thinnable, uncrosslinked polyesters for polyether polyols for printing inks)

IT Adhesives  
(prodn. of hyperbranched, water-thinnable, uncrosslinked polyesters for polyether polyols for adhesives)

IT Coating materials  
(prodn. of hyperbranched, water-thinnable, uncrosslinked polyesters for polyether polyols for coatings)

IT Lacquers  
(prodn. of hyperbranched, water-thinnable, uncrosslinked polyesters for polyether polyols for lacquers)

IT 50586-59-9P, Ethoxylated trimethylolpropane  
(Lupranol VP 9266; prodn. of hyperbranched, water-thinnable, uncrosslinked polyesters for polyether polyols)

IT 26655-24-3P, Glycerol-phthalic anhydride copolymer 27380-79-6P, Adipic acid-glycerol copolymer 30875-76-4P, Adipic acid-ethylene glycol-glycerol copolymer 173855-12-4P, Adipic acid-ethoxylated trimethylolpropane copolymer 188550-41-6P, Adipic acid-ethoxylated glycerol copolymer 669052-68-0P, Adipic acid-glycerol-glycerol monostearate copolymer 669052-71-5P, 1,2-Cyclohexanedicarboxylic acid-glycerol copolymer 669053-68-3P, Adipic acid-glycerol copolymer stearate  
(prodn. of hyperbranched, water-thinnable, uncrosslinked polyesters for polyether polyols)

L73 ANSWER 6 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 139:152300 HCA Full-text

TI Stable high-voltage composite polymer electrolytes for secondary lithium nonaqueous-electrolyte batteries

IN Zaghib, Karim; Perrier, Michel; Guerfi, Abdelbast; Dupuis, Elisabeth; Charest, Patrick; Allaire, Francois; Armand, Michel

PA Hydro-Quebec, Can.

SO PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DT Patent

LA French

FAN.CNT 1

	PATENT NO. ----- -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
PI	WO 2003063287	A2	20030731	WO 2003-CA52	200301 15

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WO 2003063287 A3 20031204

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,  
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,  
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,  
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,  
NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ,  
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI,  
SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
SN, TD, TG

CA 2367290	A1	20030716	CA 2002-2367290	200201 16
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CA 2471395	A1	20030731	CA 2003-2471395	200301 15
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EP 1466379	A2	20041013	EP 2003-700260	200301 15
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,  
PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU,  
SK

JP 2006501600	T	20060112	JP 2003-563038	200301 15
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US 20050234177	A1	20051020	US 2005-501844	200506 10
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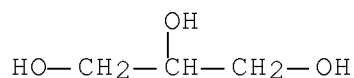


PRAI CA 2002-2367290 A 20020116 <--  
 WO 2003-CA52 W 20030115 <--

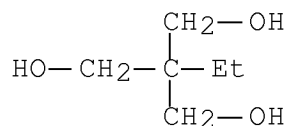
AB A composite polymer electrolyte for an electrochem. generator (esp. a secondary lithium battery) consists of: (1) a star- branched polymer with four branches contg. terminating (meth)acrylate, Cl-8-alkoxy, and vinyl groups, (2) polyvinylidene difluoride (mol. wt. 100,000-250,000), (3) vinylidene difluoride-hexafluoropropene copolymer (mol. wt. 100,000-250,000), (4) PTFE (mol. wt. 200,000), (5) ethylene-propylene-5-methylene-2-norbornene copolymer or EPDM rubber, (6) polyvinyl alc. or a substituted polyvinyl alc., (7) poly(C2-3-alkoxylated) glycerol or trimethylolpropane, crosslinked and isocyanate-terminated, (8) poly(Me methacrylate) (mol. wt. 50,000-500,000), (9) polyacrylonitrile (mol. wt. 20,000-200,000), (10) SiO2-Al2O3, and (11) TiO2 nanoparticles, optionally coated with an org. material. The composite polymer electrolyte, which can be crosslinked (e.g., by radical initiators), also contains assocd. conducting salts, esp. lithium salts, and org. solvents, esp. carbonates, lactones, and tetra-Et sulfamide. A suitable anode for use with this composite electrolyte is preferably Al-Li alloy, Li4.4Sn22, Li4Ti5O12; suitable cathodes are LiCoPo4 or Li(Mn0.66Ni0.34)O2.

IT 56-81-5D, Glycerol, poly(C2-3-alkoxylated) derivs., isocyanate-terminated 77-99-6D, Trimethylolpropane, poly(C2-3-alkoxylated) derivs., isocyanate-terminated  
 (composite polyelectrolyte contg.; stable high-voltage composite polymer electrolytes for secondary lithium nonaq.-electrolyte batteries)

RN 56-81-5 HCA  
 CN 1,2,3-Propanetriol (CA INDEX NAME)



RN 77-99-6 HCA  
 CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



IC ICM H01M010-40  
ICS H01G009-02; C08F290-06; C08G065-329  
CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)  
Section cross-reference(s): 38  
ST high voltage stable polymer battery electrolyte composite;  
star branched polymer battery  
electrolyte composite; EPDM rubber polymer battery electrolyte  
composite; nonaq battery electrolyte composite polymer  
IT Acrylic polymers, uses  
Polymers, uses  
(star-branched; stable high-voltage composite  
polymer electrolytes for secondary lithium nonaq.-electrolyte  
batteries)  
IT 56-81-5D, Glycerol, poly(C2-3-alkoxylated)  
derivs., isocyanate-terminated 77-99-6D,  
Trimethylolpropane, poly(C2-3-alkoxylated) derivs.,  
isocyanate-terminated 1344-28-1, Alumina, uses 7631-86-9,  
Silica, uses 9002-84-0, PTFE 9002-89-5, Polyvinyl alcohol  
9002-89-5D, Polyvinyl alcohol, O-derivs. 9011-14-7, Polymethyl  
methacrylate 9011-17-0 24937-79-9, Polyvinylidene difluoride  
25014-41-9, Polyacrylonitrile 25034-77-9 570375-13-2, Elexcel MP  
210-1  
(composite polyelectrolyte contg.; stable high-voltage composite  
polymer electrolytes for secondary lithium nonaq.-electrolyte  
batteries)

L73 ANSWER 7 OF 33 HCA COPYRIGHT 2008 ACS on STN  
AN 139:150100 HCA Full-text  
TI Chain extended dendritic polyether  
IN Haeggman, Bo; James, David; Bjoernberg, Hakan; Midelf, Birger  
PA Perstorp Specialty Chemicals Ab, Swed.  
SO PCT Int. Appl., 28 pp.  
CODEN: PIXXD2

DT Patent  
LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 2003062306	A1	20030731	WO 2003-SE117	20030122

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,  
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,  
 LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,  
 NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ,  
 TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI,  
 SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
 SN, TD, TG

SE 2002000207 A 20030726 SE 2002-207

200201  
25

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SE 524461 C2 20040810  
 EP 1468040 A1 20041020 EP 2003-731877

200301  
22

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,  
 PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU,  
 SK  
 JP 2005515283 T 20050526 JP 2003-562180

200301  
22

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CN 1622968 A 20050601 CN 2003-802699

200301  
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US 20050131205 A1 20050616 US 2004-501024

200409  
14

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US 7091308 B2 20060815  
 PRAI SE 2002-207 A 20020125 <--  
 WO 2003-SE117 W 20030122 <--

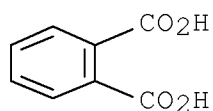
AB A dendritic polyether with narrow mol. wt. comprises a dendritic core polymer and a chain extension bonded to said core polymer, which is at least partially chain terminated and/or partially functionalized. The core polymer is a polyhydric dendritic polyether and the chain extension is obtained by addn. of at least one alkylene oxide to at least one hydroxyl group in said core polymer at mol ratio of core polymer to alkylene oxide of 1:(1-100). A typical chain-extended dendritic polyether was manufd by reacting 28.55 g 3-ethyl-3-(hydroxymethyl)oxetane 4 h with 7.28 g PP50 (ethoxylated pentaerythritol) at 110°, adding 357 g KOH (as an aq. soln.) to 35.5 kg resulting 2nd generation dendritic polyether, heating 1 h at 80°,

removing the water by vacuum and increasing the temp. to 110°, adding 28.8 g ethylene oxide under pressure and N in 1.5 h at 110-120°, and heating 3 h at 110°.

IT 88-99-3DP, Phthalic acid, esters with polyethers with dendritic initiators 124-04-9DP, Adipic acid, esters with polyethers with dendritic initiators (functionalized polyoxyalkylenes with dendritic initiators)

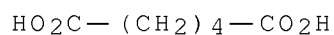
RN 88-99-3 HCA

CN 1,2-Benzenedicarboxylic acid (CA INDEX NAME)



RN 124-04-9 HCA

CN Hexanedioic acid (CA INDEX NAME)

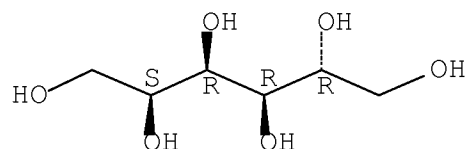


IT 50-70-4, Sorbitol, reactions 56-81-5, Glycerol, reactions 69-65-8, Mannitol 77-85-0, Trimethylolpropane 77-99-6, Trimethylolpropane 126-30-7, Neopentyl glycol 126-58-9, Dipentaerythritol 23235-61-2, Ditrithymethylolpropane 34541-79-2, Ditrithymethylolethane 59113-36-9, Diglycerol (initiator precursor; polyoxyalkylenes with dendritic initiators)

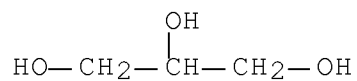
RN 50-70-4 HCA

CN D-Glucitol (CA INDEX NAME)

Absolute stereochemistry.

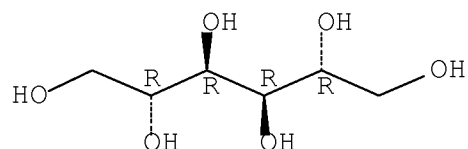


RN 56-81-5 HCA  
CN 1,2,3-Propanetriol (CA INDEX NAME)

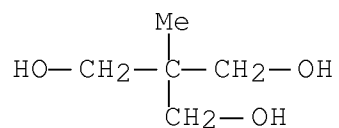


RN 69-65-8 HCA  
CN D-Mannitol (CA INDEX NAME)

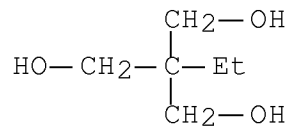
Absolute stereochemistry.



RN 77-85-0 HCA  
CN 1,3-Propanediol, 2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)

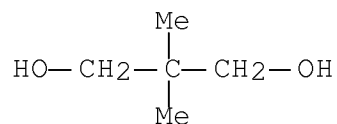


RN 77-99-6 HCA  
CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



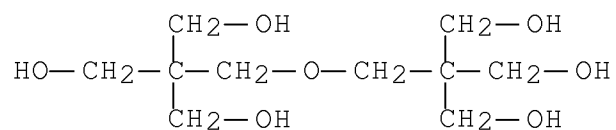
RN 126-30-7 HCA

CN 1,3-Propanediol, 2,2-dimethyl- (CA INDEX NAME)



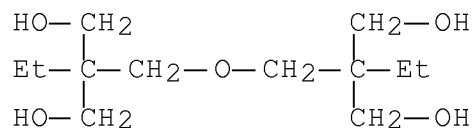
RN 126-58-9 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)- (CA INDEX NAME)



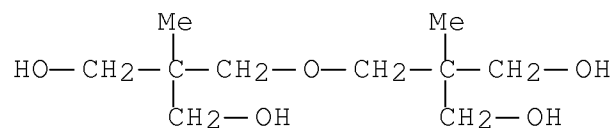
RN 23235-61-2 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-ethyl- (CA INDEX NAME)



RN 34541-79-2 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-methyl- (CA INDEX NAME)



RN 59113-36-9 HCA

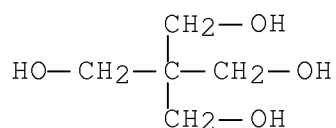
CN Propanediol, oxybis- (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 115-77-5D, Pentaerythritol, tall-oil fatty acid alkyd resins  
(sunflower-oil-fatty acid esters of polyoxyalkylenes with  
dendritic initiators for dispersants in alkyd and acrylic  
emulsion paints)

RN 115-77-5 HCA

CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



IC ICM C08G083-00

CC 35-7 (Chemistry of Synthetic High Polymers)

ST dendritic polymer initiated polyoxyalkylene manuf;  
pentaerythritol polyoxyethylene ethylhydroxymethyloxetane manuf

IT Coating materials  
(UV-curable; acrylates of reaction products of  
ethyl(hydroxymethyl)oxetane-ethoxylated pentaerythritol  
adducts for UV-curable, flexible waterproof coatings)

IT Ethers, preparation  
(allyl, reaction products, with polyethers with dendritic  
initiators; functionalized polyoxyalkylenes with  
dendritic initiators)

IT Acrylic polymers, uses  
(coating binder; sunflower-oil-fatty acid esters of  
polyoxyalkylenes with dendritic initiators for  
dispersants in alkyd and acrylic emulsion paints)

IT Fatty acids, preparation  
(dehydrated castor-oil, esters, with polyethers with  
dendritic initiators; functionalized polyoxyalkylenes  
with dendritic initiators)

IT Paints  
(emulsions; sunflower-oil-fatty acid esters of polyoxyalkylenes  
with dendritic initiators for dispersants in alkyd and  
acrylic emulsion paints)

IT Vinyl compounds, uses  
(ester group-contg., polymers; polyoxyalkylenes with  
dendritic initiators for toughening agents in vinyl ester  
polymers)

IT Sulfonic acids, preparation  
(esters, with polyethers with dendritic initiators;  
functionalized polyoxyalkylenes with dendritic

initiators)

IT Coating materials  
(flexible; acrylates of reaction products of ethyl(hydroxymethyl)oxetane-ethoxylated pentaerythritol adducts for UV-curable, flexible waterproof coatings)

IT Ethers, preparation  
(glycidyl, with polyethers with dendritic initiators; functionalized polyoxyalkylenes with dendritic initiators)

IT Dendritic polymers  
(hyperbranched, initiators; polyoxyalkylenes with dendritic initiators)

IT Fatty acids, preparation  
(linseed-oil, esters, with polyethers with dendritic initiators; functionalized polyoxyalkylenes with dendritic initiators)

IT Emulsions  
(paints; sunflower-oil-fatty acid esters of polyoxyalkylenes with dendritic initiators for dispersants in alkyd and acrylic emulsion paints)

IT Polyoxyalkylenes, preparation  
(polyoxyalkylenes with dendritic initiators)

IT Concrete  
(polyoxyalkylenes with dendritic initiators for concrete additives)

IT Adhesives  
(polyoxyalkylenes with dendritic initiators for prepn. of adhesives)

IT Polyamides, uses  
(polyoxyalkylenes with dendritic initiators for processing aid for polyamides)

IT Polycarbonates, uses  
(polyoxyalkylenes with dendritic initiators for processing aid for polycarbonates)

IT Polyesters, uses  
(polyoxyalkylenes with dendritic initiators for processing aid for polyesters)

IT Polyimides, uses  
(polyoxyalkylenes with dendritic initiators for processing aid for polyimides)

IT Polyolefins  
(polyoxyalkylenes with dendritic initiators for processing aid for polyolefins)

IT Polycyanurates  
(polyoxyalkylenes with dendritic initiators for toughening agents in cyanate ester polymers)

IT Aminoplasts



(polyoxyalkylenes with dendritic initiators for toughening agents in melamine resins)

IT Phenolic resins, uses  
(polyoxyalkylenes with dendritic initiators for toughening agents in phenolic resins)

IT Polyurethanes, uses  
(polyoxyalkylenes with dendritic initiators for toughening agents in polyurethanes)

IT Aminoplasts  
(polyoxyalkylenes with dendritic initiators for toughening agents in urea resins)

IT Inks  
(printing; polyoxyalkylenes with dendritic initiators for printing ink additives)

IT Polyoxyalkylenes, preparation  
(reaction products with dendritic initiators; polyoxyalkylenes with dendritic initiators)

IT Polyoxyalkylenes, preparation  
(reaction products with ethyl(hydroxymethyl)oxetane-ethoxylated pentaerythritol adducts; polyoxyalkylenes with dendritic initiators)

IT Acid halides  
Anhydrides  
Isocyanates  
Thiols, preparation  
(reaction products, with polyethers with dendritic initiators; functionalized polyoxyalkylenes with dendritic initiators)

IT Carboxylic acids, preparation  
(reaction products, with polyethers with dendritic initiators; polyoxyalkylenes with dendritic initiators)

IT Fatty acids, preparation  
(safflower-oil, esters, with polyethers with dendritic initiators; functionalized polyoxyalkylenes with dendritic initiators)

IT Fatty acids, preparation  
(soya, esters, with polyethers with dendritic initiators; functionalized polyoxyalkylenes with dendritic initiators)

IT Fatty acids, preparation  
(sunflower-oil, esters, with dendritic polyol-initiated polyethylene glycol; functionalized polyoxyalkylenes with dendritic initiators for dispersants for pigments and alkyd resin emulsion coatings)

IT Dispersing agents  
(sunflower-oil-fatty acid esters of polyoxyalkylenes with dendritic initiators for dispersants in alkyd and acrylic

emulsion paints)

IT Alkyd resins  
(sunflower-oil-fatty acid esters of polyoxyalkylenes with dendritic initiators for dispersants in alkyd and acrylic emulsion paints)

IT Fatty acids, uses  
(tall-oil; sunflower-oil-fatty acid esters of polyoxyalkylenes with dendritic initiators for dispersants in alkyd and acrylic emulsion paints)

IT Fatty acids, preparation  
(tung-oil, esters, with polyethers with dendritic initiators; functionalized polyoxyalkylenes with dendritic initiators)

IT Polyesters, uses  
(unsatd.; polyoxyalkylenes with dendritic initiators for toughening agents in unsatd. polyesters)

IT Ethers, preparation  
(vinyl, reaction products, with polyethers with dendritic initiators; functionalized polyoxyalkylenes with dendritic initiators)

IT Coating materials  
(water-resistant; acrylates of reaction products of ethyl(hydroxymethyl)oxetane-ethoxylated pentaerythritol adducts for UV-curable, flexible waterproof coatings)

IT 570412-92-9, Mowilith LDM 7451  
(coating binder; sunflower-oil-fatty acid esters of polyoxyalkylenes with dendritic initiators for dispersants in alkyd and acrylic emulsion paints)

IT 51728-26-8, Ebecryl 40  
(crosslinker; acrylates of reaction products of ethyl(hydroxymethyl)oxetane-ethoxylated pentaerythritol adducts for UV-curable, flexible waterproof coatings)

IT 57-10-3DP, Palmitic acid, reaction products with polyoxyalkylenes with dendritic initiators 57-11-4DP, Stearic acid, reaction products with polyoxyalkylenes with dendritic initiators 60-33-3DP, Linoleic acid, reaction products with polyoxyalkylenes with dendritic initiators 64-19-7DP, Acetic acid, reaction products with polyoxyalkylenes with dendritic initiators 65-85-0DP, Benzoic acid, reaction products with polyoxyalkylenes with dendritic initiators 75-98-9DP, Trimethylacetic acid, reaction products with polyoxyalkylenes with dendritic initiators 79-09-4DP, Propionic acid, reaction products with polyoxyalkylenes with dendritic initiators 79-31-2DP, Isobutyric acid, reaction products with polyoxyalkylenes with dendritic initiators 79-41-4DP, Methacrylic acid, reaction products with polyethers with dendritic initiators 88-99-3DP, Phthalic acid,

esters with polyethers with dendritic initiators  
98-73-7DP, p-tert-Butylbenzoic acid, reaction products with  
polyoxyalkylenes with dendritic initiators 100-21-0DP,  
Terephthalic acid, esters with polyethers with dendritic  
initiators 106-89-8DP, Epichlorohydrin, reaction products with  
polyethers with dendritic initiators 106-95-6DP, Allyl  
bromide, reaction products with polyethers with dendritic  
initiators 107-05-1DP, Allyl chloride, reaction products with  
polyethers with dendritic initiators 107-92-6DP, Butyric  
acid, reaction products with polyoxyalkylenes with dendritic  
initiators 109-52-4DP, Valeric acid, reaction products with  
polyoxyalkylenes with dendritic initiators 110-44-1DP,  
Sorbic acid, reaction products with polyoxyalkylenes with  
dendritic initiators 111-14-8DP, Heptanoic acid, reaction  
products with polyoxyalkylenes with dendritic initiators  
112-05-0DP, Nonanoic acid, reaction products with polyoxyalkylenes  
with dendritic initiators 112-80-1DP, Oleic acid,  
reaction products with polyoxyalkylenes with dendritic  
initiators 112-85-6DP, Behenic acid, reaction products with  
polyoxyalkylenes with dendritic initiators 112-86-7DP,  
Erucic acid, reaction products with polyoxyalkylenes with  
dendritic initiators 121-91-5DP, Isophthalic acid, esters  
with polyethers with dendritic initiators 123-99-9DP,  
Azelaic acid, esters with polyethers with dendritic  
initiators 124-04-9DP, Adipic acid, esters with polyethers  
with dendritic initiators 124-07-2DP, Caprylic acid,  
reaction products with polyoxyalkylenes with dendritic  
initiators 141-22-0DP, Ricinoleic acid, reaction products with  
polyoxyalkylenes with dendritic initiators 142-62-1DP,  
Caproic acid, reaction products with polyoxyalkylenes with  
dendritic initiators 143-07-7DP, Lauric acid, reaction  
products with polyoxyalkylenes with dendritic initiators  
149-57-5DP, 2-Ethylhexanoic acid, reaction products with  
polyoxyalkylenes with dendritic initiators 334-48-5DP,  
Capric acid, reaction products with polyoxyalkylenes with  
dendritic initiators 463-40-1DP, Linolenic acid, reaction  
products with polyoxyalkylenes with dendritic initiators  
503-64-0DP, Isocrotonic acid, reaction products with  
polyoxyalkylenes with dendritic initiators 506-46-7DP,  
Cerotic acid, reaction products with polyoxyalkylenes with  
dendritic initiators 506-48-9DP, Montanic acid, reaction  
products with polyoxyalkylenes with dendritic initiators  
514-10-3DP, Abietic acid, reaction products with polyoxyalkylenes  
with dendritic initiators 528-44-9DP, Trimellitic acid,  
esters with polyethers with dendritic initiators  
544-63-8DP, Myristic acid, reaction products with polyoxyalkylenes  
with dendritic initiators 557-59-5DP, Lignoceric acid,

reaction products with polyoxyalkylenes with dendritic  
 initiators 3132-64-7DP, Epibromohydrin, reaction products with  
 polyethers with dendritic initiators 3724-65-0P,  
 Crotonic acid 7664-38-2DP, Phosphoric acid, esters with polyethers  
 with dendritic initiators 26896-18-4DP, Isononanoic  
 acid, reaction products with polyoxyalkylenes with dendritic  
 initiators 30399-84-9DP, Isostearic acid, reaction products with  
 polyoxyalkylenes with dendritic initiators  
 (functionalized polyoxyalkylenes with dendritic  
 initiators)

IT 630105-35-0P  
 (functionalized polyoxyalkylenes with dendritic  
 initiators)

IT 50-70-4, Sorbitol, reactions 56-81-5, Glycerol,  
 reactions 69-65-8, Mannitol 77-84-9,  
 2-Methyl-2-ethyl-1,3-propanediol 77-85-0,  
 Trimethylolethane 77-99-6, Trimethylolpropane 110-63-4,  
 1,4-Butanediol, reactions 111-29-5, 1,5-Pentanediol 115-84-4,  
 2-Ethyl-2-butyl-1,3-propanediol 126-30-7, Neopentyl glycol  
 126-58-9, Dipentaerythritol 629-11-8, 1,6-Hexanediol  
 2163-42-0, 2-Methyl-1,3-propanediol 2658-60-8,  
 1,1-Cyclohexanedimethanol 2754-18-9, 3,3-Bis(hydroxymethyl)oxetane  
 3143-02-0, 3-Methyl-3-(hydroxymethyl)oxetane 3971-29-7,  
 1,2-Cyclohexanedimethanol 4744-47-2, Anhydroenneaheptitol  
 6228-25-7, 5,5-Bis(hydroxymethyl)-1,3-dioxane 23235-61-2,  
 Ditrimehtylolpropane 34541-79-2, Ditrimehtylolethane  
 59113-36-9, Diglycerol  
 (initiator precursor; polyoxyalkylenes with dendritic  
 initiators)

IT 42503-45-7DP, PP50, reaction products with  
 ethyl(hydroxymethyl)oxetane 630104-57-3P  
 (initiator; polyoxyalkylenes with dendritic initiators)

IT 25189-69-9DP, Phenylloxirane polymer, reaction products with  
 dendritic initiators 25322-69-4DP, Polypropylene glycol,  
 reaction products with dendritic initiators  
 25702-20-9DP, Cyclohexene oxide homopolymer, reaction products with  
 dendritic initiators 26100-60-7DP, 1,3-Epoxybutane  
 homopolymer, reaction products with dendritic initiators  
 26703-03-7DP, Polybutadiene monoxide, reaction products with  
 dendritic initiators  
 (polyoxyalkylenes with dendritic initiators)

IT 76397-91-6, Bisphenol A-epichlorohydrin-Aradur HY 917 copolymer  
 (polyoxyalkylenes with dendritic initiators as  
 tougheners for epoxy resins)

IT 9003-08-1  
 (polyoxyalkylenes with dendritic initiators for  
 toughening agents in melamine resins)

IT 9011-05-6  
 (polyoxyalkylenes with dendritic initiators for  
 toughening agents in urea resins)

IT 13463-67-7, Titania, processes 461426-90-4, Kronos 2310  
 (sunflower-oil-fatty acid esters of polyoxyalkylenes with  
 dendritic initiators for dispersants for pigments in  
 acrylic emulsion paints)

IT 115-77-5D, Pentaerythritol, tall-oil fatty acid alkyd resins  
 (sunflower-oil-fatty acid esters of polyoxyalkylenes with  
 dendritic initiators for dispersants in alkyd and acrylic  
 emulsion paints)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 8 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 138:28948 HCA Full-text

TI Cosmetic composition forming after application of a supramolecular  
 polymer

IN Mougin, Nathalie; Livoreil, Aude; Mondet, Jean

PA L'oreal, Fr.

SO PCT Int. Appl., 82 pp.  
 CODEN: PIXXD2

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2002098377	A1	20021212	WO 2002-FR1966	200206 07

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 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,  
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 NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,  
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 SN, TD, TG

FR 2825628	A1	20021213	FR 2001-7476	200106 07
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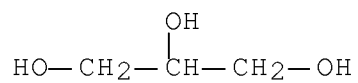
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AU 2002317916	A1	20021216	AU 2002-317916	200206 07
EP 1392222	A1	20040303	EP 2002-747520	200206 07
EP 1392222	B1	20070905		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2005520777	T	20050714	JP 2003-501419	200206 07
JP 3951000	B2	20070801		
AT 372110	T	20070915	AT 2002-747520	200206 07
ES 2292780	T3	20080316	ES 2002-747520	200206 07
US 20040161394	A1	20040819	US 2003-479716	200312 05
PRAI FR 2001-7476	A	20010607	<--	
WO 2002-FR1966	W	20020607	<--	
AB	The invention concerns a cosmetic compn. for care and/or treatment and/or make-up of keratinous materials, comprising, in a physiol. acceptable medium, an efficient amt. of at least a linear, branched or cyclic, or dendritic polymer, comprising: a polymeric skeleton including at least two repeat units, and at least two functional groups (A) fixed on the polymeric skeleton and capable of binding with one or several partner junction groups, of identical or different chem. type, each matching of two functional groups involving at least three H bridges. Prepn. of a ureido pyrimidone polydimethylsiloxane and a lipstick contg. this polymer is disclosed.			
IT	9082-00-2DP, reaction products with IPDI and 4-methylisocytosine (cosmetic compn. forming after application of supramol. polymer)			
RN	9082-00-2 HCA			
CN	Oxirane, 2-methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1) (CA INDEX NAME)			

CM 1

CRN 56-81-5

CMF C3 H8 O3



CM 2

CRN 9003-11-6

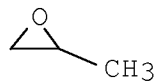
CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 3

CRN 75-56-9

CMF C3 H6 O



CM 4

CRN 75-21-8

CMF C2 H4 O



IC ICM A61K007-02

ICS A61K007-48

CC 62-4 (Essential Oils and Cosmetics)

IT Acrylic polymers, biological studies

Dendritic polymers  
Polycarbonates, biological studies  
Polyolefins  
Polyoxyalkylenes, biological studies  
Polyoxymethylenes, biological studies  
Polysiloxanes, biological studies  
Polythioethers

(cosmetic compn. forming after application of supramol. polymer)  
IT 3977-29-5DP, reaction products with ethoxylated-  
propoxylated glycerol and IPDI 4098-71-9DP, IPDI, reaction  
products with ethoxylated-propoxylated glycerol  
and 4-methylisocytosine 9082-00-2DP, reaction products  
with IPDI and 4-methylisocytosine 32801-66-4P 205751-10-6P  
(cosmetic compn. forming after application of supramol. polymer)  
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 9 OF 33 HCA COPYRIGHT 2008 ACS on STN  
AN 136:386620 HCA Full-text  
TI Process for manufacture of a dendritic polyether  
IN Pettersson, Bo; James, David; Midelf, Birger; Bjoernberg, Hakan;  
Rehnberg, Nicola  
PA Perstorp Specialty Chemicals AB, Swed.  
SO PCT Int. Appl., 25 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2002040572	A1	20020523	WO 2001-SE2519	200111 12

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,  
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,  
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,  
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,  
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,  
TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,  
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,  
TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,  
TD, TG  
SE 2000004155 A 20020515 SE 2000-4155  
200011



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SE 524174 C2 20040706  
 AU 2002014502 A 20020527 AU 2002-14502

200111  
12

&lt;--

EP 1355975 A1 20031029 EP 2001-983047

200111  
12

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,  
 PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 JP 2004514037 T 20040513 JP 2002-543576

200111  
12

&lt;--

US 20040059086 A1 20040325 US 2003-416712

200307  
07

&lt;--

US 7176264 B2 20070213  
 PRAI SE 2000-4155 A 20001114 <--  
 WO 2001-SE2519 W 20011112 <--

AB A process for manuf. of a dendritic polyether with good control of mol. wt. and increased heat resistance comprising a core, derived from a compd. having two or more hydroxyl groups, and at least one branching generation being built up from at least one hydroxyoxetane having one oxetane group and at least one hydroxyl group is disclosed. The process comprises ring opening addn. to said core and ring opening polymn. of said hydroxyoxetane. A mixt. of the core compd. and at least one cationic initiator is prepd. and said hydroxyoxetane is fed to said mixt. at a rate resulting in and/or maintaining a reaction temp. below onset at thermal degrdn. and in an amt. resulting in at least one branching generation. The initiator is present in an amt. of 0.1-0.5 % by wt. calcd. on said core and said oxetane, preferably in an amt. giving a ratio hydroxyl groups to initiator of between 1:0.01 and 1:0.05. Yielded dendritic polyether is subsequently neutralized by addn. of at least one alk. compd. and optionally purified. A typical dendritic polyether was manufd. by polymn. of 3-ethyl-3-(hydroxymethyl)oxetane in the presence of Polyol PP50 (ethoxylated pentaerythritol).

IT 50-70-4, Sorbitol, reactions 56-81-5, Glycerol, reactions 69-65-8, Mannitol 77-85-0, Trimethylolethane 77-99-6, Trimethylolpropane 115-77-5, Pentaerythritol, reactions 126-30-7, Neopentyl glycol 126-58-9, Di(pentaerythritol)

23235-61-2, Di(trimethylolpropane) 34541-79-2,

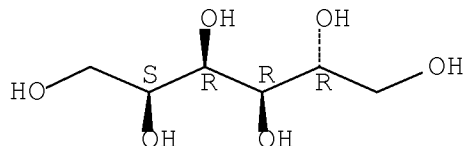
Di(trimethylolethane) 59113-36-9, Diglycerol

(core; manuf. of dendritic polyethers with polyol cores with good control of mol. wt. and increased heat resistance)

RN 50-70-4 HCA

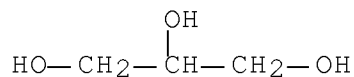
CN D-Glucitol (CA INDEX NAME)

Absolute stereochemistry.



RN 56-81-5 HCA

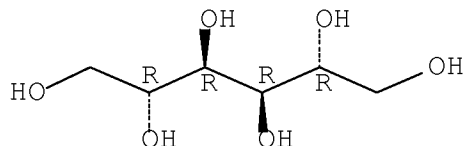
CN 1,2,3-Propanetriol (CA INDEX NAME)



RN 69-65-8 HCA

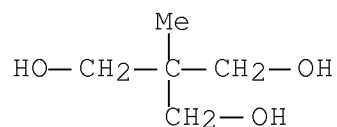
CN D-Mannitol (CA INDEX NAME)

Absolute stereochemistry.



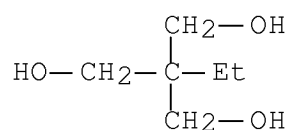
RN 77-85-0 HCA

CN 1,3-Propanediol, 2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



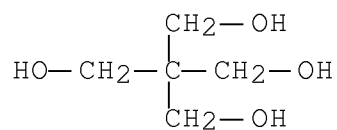
RN 77-99-6 HCA

CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



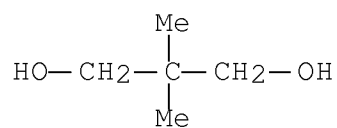
RN 115-77-5 HCA

CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



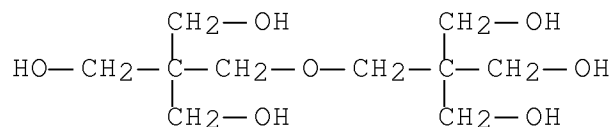
RN 126-30-7 HCA

CN 1,3-Propanediol, 2,2-dimethyl- (CA INDEX NAME)

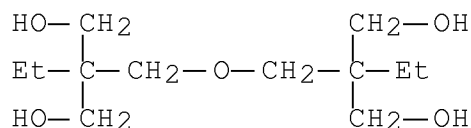


RN 126-58-9 HCA

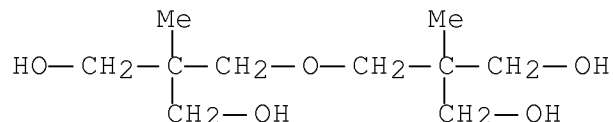
CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)- (CA INDEX NAME)



RN 23235-61-2 HCA  
 CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-ethyl- (CA INDEX NAME)



RN 34541-79-2 HCA  
 CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-methyl- (CA INDEX NAME)



RN 59113-36-9 HCA  
 CN Propanediol, oxybis- (CA INDEX NAME)  
 \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
 IC ICM C08G083-00  
 ICS C08G065-18  
 CC 35-7 (Chemistry of Synthetic High Polymers)  
 ST dendritic polyoxyalkylene controlled mol wt heat resistant;  
 polyethylhydroxymethyloxetane dendritic manuf  
 ethoxylated pentaerythritol initiator  
 IT 50-70-4, Sorbitol, reactions 56-81-5, Glycerol,  
 reactions 57-55-6, Propylene glycol, reactions 69-65-8,  
 Mannitol 77-84-9, 2-Ethyl-2-methyl-1,3-propanediol 77-85-0  
 , Trimethylolethane 77-99-6, Trimethylolpropane  
 107-21-1, Ethylene glycol, reactions 110-63-4, 1,4-Butanediol,  
 reactions 111-29-5, 1,5-Pentanediol 111-46-6, Diethylene glycol,  
 reactions 112-27-6, Triethylene glycol 115-77-5,

Pentaerythritol, reactions 115-84-4, 2-Butyl-2-ethyl-1,3-propanediol 126-30-7, Neopentyl glycol 126-58-9, Di(pentaerythritol) 629-11-8, 1,6-Hexanediol 2163-42-0, 2-Methyl-1,3-propanediol 2658-60-8, 1,1-Cyclohexanedimethanol 4744-47-2, Anhydroenneaheptitol 6228-25-7, 5,5-Bis(hydroxymethyl)-1,3-dioxane 23235-61-2, Di(trimethylolpropane) 24800-44-0, Tripropylene glycol 25265-71-8, Dipropylene glycol 25322-68-3, Polyethylene glycol 25322-69-4, Polypropylene glycol 34541-79-2, Di(trimethylolethane) 42429-85-6, 2,2-Dihydroxy-1,3-propanediol 42503-45-7, PP50 59113-36-9, Diglycerol

(core; manuf. of dendritic polyethers with polyol cores with good control of mol. wt. and increased heat resistance)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 10 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 136:321601 HCA Full-text

TI Pentaerythritol propoxylate: a new crystallization agent and cryoprotectant induces crystal growth of 2-methylcitrate dehydratase

AU Gulick, Andrew M.; Horswill, Alexander R.; Thoden, James B.; Escalante-Semerena, Jorge C.; Rayment, Ivan

CS Department of Biochemistry, University of Wisconsin, Madison, WI, 53706, USA

SO Acta Crystallographica, Section D: Biological Crystallography (2002), D58(2), 306-309

CODEN: ABCRE6; ISSN: 0907-4449

PB Blackwell Munksgaard

DT Journal

LA English

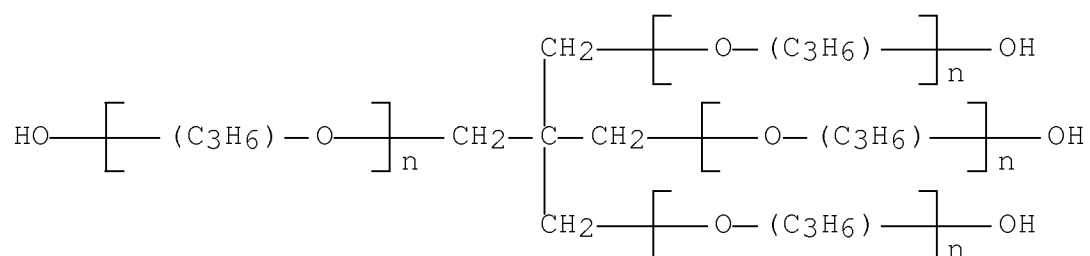
AB In the search for macromol. crystn. conditions, the precipitant is probably the most important variable, such that when problematic crystals are encountered there is always the question of whether an alternative precipitant might resolve the problem. During an effort to obtain high-quality crystals of several problematic proteins, 2 new agents, pentaerythritol propoxylate and pentaerythritol ethoxylate, yielded well-ordered quality crystals where more traditional precipitants were unsuccessful. Pentaerythritol propoxylate and pentaerythritol ethoxylate contain a pentaerythritol backbone to which org. polymers are bound, forming a branched polymer. As such, they are larger than small org. precipitants such as low mol.-wt. alcs. or 2-methyl-2,4-pentanediol, but behave differently than polyethylene glycols. Here, these compds. were used to crystallize 2-methylcitrate dehydratase encoded by the Salmonella enterica prpD gene that catalyzes the dehydration of 2-methylcitrate to form 2-methyl-cis-aconitate. Whereas the PrpD protein has

previously crystd. readily under a no. of conditions, the resultant crystals were found to be unsuitable for crystal structure detn. The new crystals obtained with 25-40% pentaerythritol propoxylate belonged to orthorhombic space group C2221, with unit-cell parameters  $a = 73.2$ ,  $b = 216.4$ ,  $c = 214.3$  Å, and diffracted beyond 2.0 Å with synchrotron radiation. A further benefit of this precipitant for crystn. was its ability to function as a cryoprotectant, allowing the crystals to be transferred directly from the mother liquor to the N<sub>2</sub> stream at 113 K.

IT 9051-49-4, Pentaerythritol propoxylate  
 (pentaerythritol propoxylate as a new crystn. agent and cryoprotectant which induced the crystal growth of *Salmonella enterica* 2-methylcitrate dehydratase)

RN 9051-49-4 HCA

CN Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (CA INDEX NAME)



CC 9-16 (Biochemical Methods)  
 Section cross-reference(s): 75

ST methylcitrate dehydratase crystal growth pentaerythritol propoxylate precipitant

IT Crystal growth  
*Salmonella enterica*  
 (pentaerythritol propoxylate as a new crystn. agent and cryoprotectant which induced the crystal growth of *Salmonella enterica* 2-methylcitrate dehydratase)

IT 9051-49-4, Pentaerythritol propoxylate  
 42503-45-7, Pentaerythritol ethoxylate  
 (pentaerythritol propoxylate as a new crystn. agent and cryoprotectant which induced the crystal growth of *Salmonella enterica* 2-methylcitrate dehydratase)

IT 80891-26-5, 2-Methylcitrate dehydratase  
 (pentaerythritol propoxylate as a new crystn. agent and cryoprotectant which induced the crystal growth of *Salmonella*

enterica 2-methylcitrate dehydratase)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 11 OF 33 HCA COPYRIGHT 2008 ACS on STN  
AN 136:168212 HCA Full-text  
TI Dendritic macromolecule with improved polyether  
polyol solubility and process for production thereof  
IN Pettersson, Bo; Bjoernberg, Hakan  
PA Perstorp AB, Swed.  
SO PCT Int. Appl., 23 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2002010189	A2	20020207	WO 2001-SE1518	200107 02

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WO 2002010189 A3 20020418  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,  
CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,  
LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ,  
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ,  
UA, UG, US, UZ, VN, YU, ZA, ZW  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,  
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,  
TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD,  
TG

CA	2417679	A1	20020207	CA 2001-2417679	200107 02
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EP	1305358	A2	20030502	EP 2001-961471	200107 02
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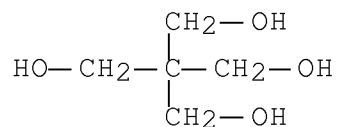
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BR 2001012819 A 20030729 BR 2001-12819  
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02

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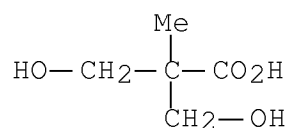
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US	20030176591	A1	20030918	US	2003-343046	200303 13
				<--		
HK	1059793	A1	20061013	HK	2004-102628	200404 15
				<--		
US	20050240000	A1	20051027	US	2005-158062	200506 22
				<--		
PRAI	US 2000-221512P	P	20000728	<--		
	WO 2001-SE1518	W	20010702	<--		
	US 2003-343046	A1	20030313	<--		
AB	Disclosed is a dendritic macromol. having the following characteristics: (i) an active hydrogen content of at least 3.8 mmol/g and (ii) an active hydrogen functionality of at least 16 and which macromol. is mixable at a ratio of at least 15% with a polyether polyol having a hydroxyl value of at most 40 mg KOH/g to form a stable liq. at 23°. The subject dendritic macromol. confer significant load building properties to isocyanate based foams and elastomers such as polyurethane foams and elastomers and may be used for this purpose to partially or fully displace current relatively expensive chem. systems which are used to confer load building characteristics to such foams and elastomers.					
IT	115-77-5DP, Pentaerythritol, alkoxyated, dendritic macromol. with 2,2-dimethylolpropionic acid, modified products 4767-03-7DP, 2,2-Dimethylolpropionic acid, reaction products with alkoxyated pentaerythritol (dendritic macromol. with improved polyether polyol soly. and process for prodn. thereof)					
RN	115-77-5 HCA					
CN	1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)					





RN 4767-03-7 HCA

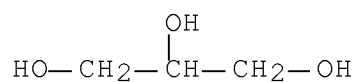
CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



IT 56-81-5DP, Glycerin, polyurethanes with dendritic macromol. and polyisocyanates  
(dendritic macromol. with improved polyether polyol soly. and process for prodn. thereof)

RN 56-81-5 HCA

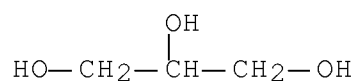
CN 1,2,3-Propanetriol (CA INDEX NAME)



IT 56-81-5D, Glycerol, polyether polyols  
(soly. in; dendritic macromol. with improved polyether polyol soly. and process for prodn. thereof)

RN 56-81-5 HCA

CN 1,2,3-Propanetriol (CA INDEX NAME)



IC ICM C07K

CC 37-3 (Plastics Manufacture and Processing)  
 Section cross-reference(s): 39

ST dendritic macromol polyether polyol soly  
 polyurethane foam elastomer; load building characteristic  
 polyurethane foam elastomer dendritic macromol

IT Fatty acids, preparation  
 (C9; reaction products with dendritic macromol.,  
 modified products; dendritic macromol. with improved  
 polyether polyol soly. and process for prodn. thereof)

IT Polyurethanes, preparation  
 (cellular; dendritic macromol. with improved polyether  
 polyol soly. and process for prodn. thereof)

IT Polyesters, preparation  
 (dendrimers; dendritic macromol. with  
 improved polyether polyol soly. and process for prodn.  
 thereof)

IT Urethane rubber, preparation  
 (dendritic macromol. with improved polyether  
 polyol soly. and process for prodn. thereof)

IT Dendritic polymers  
 (polyesters; dendritic macromol. with improved  
 polyether polyol soly. and process for prodn. thereof)

IT Polyoxyalkylenes, miscellaneous  
 (soly. in; dendritic macromol. with improved polyether  
 polyol soly. and process for prodn. thereof)

IT 79-10-7DP, Acrylic acid, reaction products with  
 dendritic macromol., redn. products 107-13-1DP,  
 Acrylonitrile, reaction products with dendritic macromol.,  
 redn. products 115-77-5DP, Pentaerythritol,  
 alkoxylated, dendritic macromol. with  
 2,2-dimethylolpropionic acid, modified products  
 4767-03-7DP, 2,2-Dimethylolpropionic acid,  
 reaction products with alkoxylated pentaerythritol  
 26221-61-4DP, Trimethylolpropane oxetane polymer, modified products  
 (dendritic macromol. with improved polyether  
 polyol soly. and process for prodn. thereof)

IT 56-81-5DP, Glycerin, polyurethanes with dendritic  
 macromol. and polyisocyanates 111-42-2DP, Dabco DEOA-LF,  
 polyurethanes with dendritic macromol. and  
 polyisocyanates, preparation 26471-62-5DP, TDI, polyurethanes with  
 dendritic macromol. and polyols 122878-95-9DP,  
 Lupranate T 80, polyurethanes with dendritic macromol. and  
 polyols 395679-34-2DP, E 837, polyurethanes with  
 dendritic macromol. and polyisocyanates 395680-09-8DP,  
 Hyperlite E 850, polyurethanes with dendritic macromol.  
 and polyisocyanates  
 (dendritic macromol. with improved polyether

polyol soly. and process for prodn. thereof)  
IT 56-81-5D, Glycerol, polyether polyols  
(soly. in; dendritic macromol. with improved polyether  
polyol soly. and process for prodn. thereof)

L73 ANSWER 12 OF 33 HCA COPYRIGHT 2008 ACS on STN  
AN 136:152361 HCA Full-text  
TI Foamed dendritic polyol-based polyurethane  
having improved hardness properties and process for production  
thereof  
IN Van Heumen, Jeffrey D.; Farkas, Paul V.; Stanciu, Romeo  
PA Woodbridge Foam Corporation, Can.  
SO PCT Int. Appl., 38 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2002010247	A1	20020207	WO 2001-CA1086	200107 30

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GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO,  
NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,  
TZ, UA, UG, UZ, VN, YU, ZA, ZW  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,  
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,  
TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,  
TD, TG

CA	2394563	A1	20020207	CA 2001-2394563	200107 30
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US	20020061936	A1	20020523	US 2001-917235	200107 30
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BR	2001007276	A	20020827	BR 2001-7276	200107 30
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EP	1248809	A1	20021016	EP 2001-953735	
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200107  
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,  
PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
JP 2004505140 T 20040219 JP 2002-515974

200107  
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AU 777710 B2 20041028 AU 2001-76226

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MX 2002PA12835 A 20030521 MX 2002-PA12835

200212  
19

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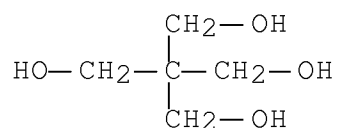
PRAI US 2000-221511P P 20000728 <--  
WO 2001-CA1086 W 20010730 <--

AB In one of its aspects, the present invention relates to foamed isocyanate-based polymer derived from a reaction mixt. comprising an isocyanate, an active hydrogen-contg. compd., a dendritic macromol. and a blowing agent; wherein at least 15% of the dendritic macromol. may be mixed with a polyether polyol having an OH no. less than about 40 mg KOH/g to form a stable liq. at 23°. The dendritic macromol. confers advantageous load building characteristics to the foamed isocyanate-based polymer and may be used to partially or fully displace the use of conventional copolymer polyols used. A process for prodn. of a foam isocyanate-based polymer and a process for conferring loading building properties to a foamed isocyanate-based polymer are also described.

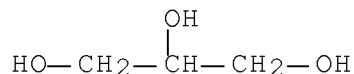
IT 115-77-5DP, Pentaerythritol, alkoxyated, reaction products with 2,2-dimethylolpropionic acid homopolymer, polyurethanes  
(dendritic; foamed dendritic polyol  
-based polyurethane having improved hardness properties and process for prodn. thereof)

RN 115-77-5 HCA

CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



IT 56-81-5DP, Glycerin, polyurethanes with dendritic polyols  
 (foamed dendritic polyol-based polyurethane having improved hardness properties and process for prodn. thereof)  
 RN 56-81-5 HCA  
 CN 1,2,3-Propanetriol (CA INDEX NAME)



IC ICM C08G018-42  
 ICS C08G018-40  
 CC 38-3 (Plastics Fabrication and Uses)  
 ST dendrimer polyol polyurethane foam  
 IT Polyurethanes, properties  
 (dendrimers; foamed dendritic polyol-based polyurethane having improved hardness properties and process for prodn. thereof)  
 IT Dendritic polymers  
 (polyurethanes; foamed dendritic polyol-based polyurethane having improved hardness properties and process for prodn. thereof)  
 IT 115-77-5DP, Pentaerythritol, alkoxylated, reaction products with 2,2-dimethylolpropionic acid homopolymer, polyurethanes 34590-77-7DP, 2,2-Dimethylolpropionic acid homopolymer, reaction products with alkoxylated pentaerythritol, polyurethanes  
 (dendritic; foamed dendritic polyol-based polyurethane having improved hardness properties and process for prodn. thereof)  
 IT 56-81-5DP, Glycerin, polyurethanes with dendritic polyols 111-42-2DP, Diethanolamine, polyurethanes with dendritic polyols, properties 122878-95-9DP, Lupranate T80, polyurethanes with dendritic polyols 395679-34-2DP, E 837, polyurethanes with dendritic polyols 395680-09-8DP, Hyperlite E 850, polyurethanes with dendritic polyols  
 (foamed dendritic polyol-based polyurethane having improved hardness properties and process for prodn. thereof)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 13 OF 33 HCA COPYRIGHT 2008 ACS on STN  
 AN 135:181482 HCA Full-text  
 TI Branched polymeric surfactant reaction products,  
 methods for their preparation, and uses therefor  
 IN Breindel, Kenneth; Broadbent, Ronald W.; Wiggins, Michael S.;  
 Natale, Marcie  
 PA Cognis Corporation, USA  
 SO PCT Int. Appl., 38 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2001060901	A1	20010823	WO 2001-US5303	200102 16

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,  
 CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,  
 LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ,  
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ,  
 UA, UG, UZ, VN, YU, ZA, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,  
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,  
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD,  
 TG

US	20010027227	A1	20011004	US 2001-783855	200102 15
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US	6465605	B2	20021015		
CA	2400780	A1	20010823	CA 2001-2400780	200102 16

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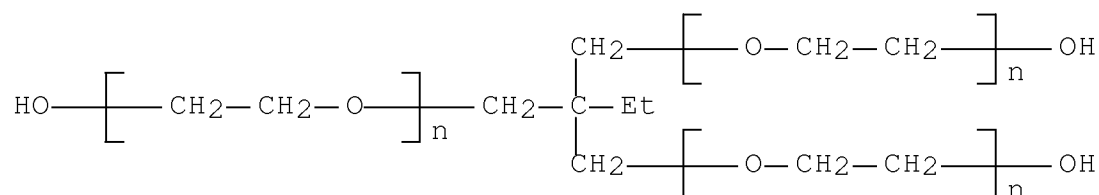
EP	1268636	A1	20030102	EP 2001-914407	200102 16
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,  
 PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 BR 2001008413 A 20030325 BR 2001-8413

				200102 16
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HU	2002004473	A2	20030528	HU 2002-4473
				200102 16
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JP	2003523433	T	20030805	JP 2001-560279
				200102 16
			<--	
ZA	2002006118	A	20031031	ZA 2002-6118
				200207 31
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MX	2002PA07697	A	20021011	MX 2002-PA7697
				200208 09
			<--	
IN	2002CN01276	A	20070817	IN 2002-CN1276
				200208 14
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NO	2002003868	A	20021015	NO 2002-3868
				200208 15
			<--	
PRAI	US 2000-182811P	P	20000216	<--
	US 2000-182967P	P	20000216	<--
	US 2000-197243P	P	20000414	<--
	US 2001-783855	A	20010215	<--
	WO 2001-US5303	W	20010216	<--
OS	MARPAT 135:181482			
AB	<p>Polymeric compds. useful as low foaming surfactants and defoaming and stabilizing agents for aq.- and nonaq.-based compns., and processes for the prepn. of the polymeric compds., wherein the polymeric compds. are the reaction products of reactants comprising (A) at least one linking compd. of formula R1(X)3, wherein each X group is a halogen atom or one X group is halogen atom and two X groups represent an epoxy oxygen atom, which is attached to two adjacent carbon atoms in the R1 group to form an epoxy group, and R1 is an alkanetriyl C3-10 group; (B) compds. of formula R2(OA)nX, wherein R2 is a C4-36 org. group, n is integer <math>\leq 200</math>, X is OH, NHR', or SH and each OA group is independently an ethyleneoxy, 1,2-propyleneoxy, or 1,2-butylenoxy group, and (C) polyol contg. <math>\geq 3</math> OH with <math>\geq 1</math> of them being optionally alkoxylated; or polyamine contg. <math>\geq 2</math> amino groups optionally contg. alkyleneoxy groups.</p>			

IT 50586-59-9, Ethoxylated trimethylolpropane  
 (branched polymeric surfactant reaction  
 products, methods for prepn., and uses therefor)  
 RN 50586-59-9 HCA  
 CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with  
 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



IC ICM C08K005-02  
 ICS C08K005-04; C08K005-053; C08K005-06  
 CC 37-6 (Plastics Manufacture and Processing)  
 ST branched polymeric compd surfactant defoamer  
 stabilizer; polyoxyalkylene compd surfactant defoamer stabilizer;  
 polyethylene glycol compd surfactant defoamer stabilizer;  
 polypropylene glycol compd surfactant defoamer stabilizer;  
 polyol compd surfactant defoamer stabilizer; polyamine compd  
 surfactant defoamer stabilizer  
 IT Epoxy resins, preparation  
 (branched polymeric surfactant reaction  
 products, methods for prepn., and uses therefor)  
 IT 106-89-8DP, Epichlorohydrin, reaction products with tetraethylene  
 glycol dodecyl ether, polymers with ethoxylated  
 pentaerythritol 5274-68-0DP, Tetraethylene glycol monododecyl  
 ether, reaction products with epichlorohydrin, polymers with  
 ethoxylated pentaerythritol 355404-22-7P 355404-25-0P  
 355404-26-1P 355404-27-2P 355407-02-2P 355808-44-5P  
 (branched polymeric surfactant reaction  
 products, methods for prepn., and uses therefor)  
 IT 355404-21-6P  
 (branched polymeric surfactant reaction  
 products, methods for prepn., and uses therefor)  
 IT 251903-91-0P 355808-42-3P 355808-43-4P  
 (branched polymeric surfactant reaction  
 products, methods for prepn., and uses therefor)  
 IT 106-89-8, Epichlorohydrin, reactions 5703-94-6, Tetraethylene  
 glycol monodecyl ether 50586-59-9, Ethoxylated  
 trimethylolpropane 355404-23-8 355808-41-2  
 (branched polymeric surfactant reaction



products, methods for prepn., and uses therefor)  
IT 42503-45-7D, Ethoxylated pentaerythritol, polymers with  
reaction products of epichlorohydrin with tetraethylene glycol  
dodecyl ether

(branched polymeric surfactant reaction  
products, methods for prepn., and uses therefor)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 14 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 134:164643 HCA Full-text

TI Water-based ink-jet recording inks with high discharge stability and  
image concentration

IN Fujii, Yoshinori; Nozaki, Chiyoshi; Ueda, Noboru

PA Minolta Camera Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 2001040256	A	20010213	JP 1999-298143	199910 20

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PRAI JP 1999-142822 A 19990524 <--

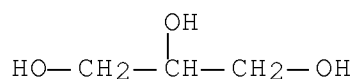
AB The title inks comprise a colorant, a water-based medium, a star  
polymer (A) formed by either ring opening polymn. of ethylene oxide  
or radical polymn. of vinyl monomers on a core mol., which can be a  
multivalent alc., carboxylic acid, amine or thiol having  $\geq 3$   
functional groups, e.g., OH, carboxyl, amino or mercapto groups, and  
optionally a cyclic polysaccharide such as a cyclodextrin. Thus,  
polymg. ethylene oxide using 1,3,5-trihydroxybenzene as core gave an  
A, 5% of which was mixed with 5% Cab-O-Jet 300 (a carbon black  
dispersion), 10% glycerin, 1% triethanolamine and 70% water, stirred  
at room temp. for 3 h, treated by a homogenizer then pressure-  
filtered using 0.65  $\mu$ m membrane filter to give a title ink.

IT 56-81-5, Glycerin, uses

(moisturizing agent; for water-based ink-jet recording inks)

RN 56-81-5 HCA

CN 1,2,3-Propanetriol (CA INDEX NAME)



IC ICM C09D011-00  
ICS B41J002-01; B41M005-00  
CC 42-12 (Coatings, Inks, and Related Products)  
Section cross-reference(s): 74  
ST discharge stability water based ink jet recording ink; image concn  
water based ink jet recording ink; ethylene oxide ring opening  
polymn star polymer recording ink; polyalc  
alkoxylate star polymer dispersion  
stabilizer ink jet ink; carboxylic acid alkoxylate  
dispersion stabilizer ink jet ink; trihydroxybenzenealkoxylate  
dispersion stabilizer ink jet ink; polyether polyol  
dispersion stabilizer ink jet ink  
IT 56-81-5, Glycerin, uses  
(moisturizing agent; for water-based ink-jet recording inks)  
IT 9003-01-4, Acrylic acid homopolymer 25549-84-2, Sodium  
acrylate homopolymer 28902-82-1, Acryloylmorpholine homopolymer  
57514-87-1, N,N-Dimethylacrylamide-2-hydroxyethyl methacrylate  
copolymer 79704-36-2 120603-34-1, N,N-Dimethylacrylamide-2-  
hydroxyethyl acrylate copolymer 146899-17-4, Acryloylmorpholine-  
styrene copolymer  
(star-shaped, pigment dispersing stability improver; for manuf.  
of water-based ink-jet recording inks)

L73 ANSWER 15 OF 33 HCA COPYRIGHT 2008 ACS on STN  
AN 134:49173 HCA Full-text  
TI Positively chargeable electrostatographic developer  
IN Nakamura, Masanobu; Furukawara, Toshiro; Toribayashi, Hideki; Oba,  
Katsunori; Shimane, Yoshinori; Sugawara, Yoshizo  
PA Dainippon Ink and Chemicals, Inc., Japan  
SO Jpn. Kokai Tokkyo Koho, 25 pp.  
CODEN: JKXXAF

DT Patent  
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 2000338721	A	20001208	JP 1999-152948	

199905  
31

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PRAI JP 1999-152948 19990531 <--  
AB The title developer contains a binder resin, a colorant, a toner releasing agent, colored resin particles contg. a pos. chargeable chare-controlling agent, and a magnetic carrier coated with a resin, wherein the binder resin is a polyester made from an epoxy compd., polybasic compd. or the deriv. thereof, and a polyalc. The releasing agent contains carnauba wax, montan-wax fatty acid esters, or/and rice wax. The developer provides wide range fixing temp. and the improved offset-resistance.  
IC ICM G03G009-087  
ICS G03G009-097; G03G009-08  
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
IT Fatty acids, reactions  
(C9-11-branched, glycidyl esters, copolymer with propoxylated bisphenol A and terephthalic acid; polyester resin in electrostatog. developer)  
IT Fatty acids, reactions  
(montan-wax, esters; polyester resin in electrostatog. developer)  
IT 100-21-0DP, Terephthalic acid, copolymer with Cardura E, propoxylated bisphenol A and Epiclon 695 25068-38-6DP, Epiclon 850, copolymer with Cardura E, propoxylated bisphenol A and terephthalic acid 37353-75-6DP, Propoxylated bisphenol A, copolymer with Crdura E, terephthalic acid and Epiclon 695 174477-43-1DP, Epiclon 695, copolymer with Cardura E, propoxylated bisphenol A and terephthalic acid  
(polyester resin in electrostatog. developer)  
IT 278792-70-4P, Pentaerythritol tetraglycidyl ether-terephthalic acid-propoxylated bisphenol A copolymer 312909-54-9P, Epiclon 695-terephthalic acid-propoxylated bisphenol A copolymer 312909-55-0P, Epiclon 850-terephthalic acid-propoxylated bisphenol A copolymer  
(polyester resin in electrostatog. developer)  
L73 ANSWER 16 OF 33 HCA COPYRIGHT 2008 ACS on STN  
AN 133:336023 HCA Full-text  
TI Process for production of a dendritic polyester acrylate composition in the presence of alcohol  
IN Pettersson, Bo; Bjornberg, Hakan  
PA Perstorp AB, Swed.  
SO PCT Int. Appl., 16 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

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PI WO 2000064975 A1 20001102 WO 2000-SE696 200004  
12

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W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU,  
CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,  
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV,  
MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,  
SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW,  
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,  
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
SE 9901517 A 20001028 SE 1999-1517

199904  
27

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SE 514075 C2 20001218  
PRAI SE 1999-1517 A 19990427 <--

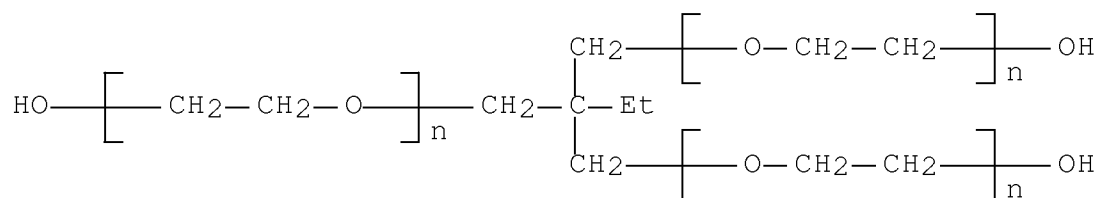
AB Process for prodn. of an acrylate compn., comprising  $\geq 1$  dendritic polyester acrylate oligomer and  $\geq 1$  acrylate monomer, comprises mixing  $\geq 1$  dendritic polyester having  $\geq 1$  terminal hydroxyl groups and  $\geq 1$  alc. having  $\geq 1$  hydroxyl groups and a mol. wt. of  $\leq 2000$ . Obtained mixt. is subsequently acylated by reaction with  $\geq 1$  compd. comprising  $\geq 1$  acrylic unsatn. yielding a reaction mixt. comprising an acrylate compn. comprising  $\geq 1$  dendritic polyester acrylate oligomer and  $\geq 1$  acrylate monomer, whereby the acrylate compn. can be recovered from the reaction mixt. Thus, Boltorn H 20, 40.0, acrylic acid 163.8, and TP 30 160.0 g, 10 drops nitrobenzene and 0.5 g methoxyphenol in toluene were heated at 55°, 3.27 g methanesulfonic acid was added, heated at 110° until esterification water evapn. ceased to give an acylated product showing conversion of OH group to acrylate 94.5 mol%, final acid value 0.75 mg-KOH/g, viscosity (Brookfield 23°) 180 mPas., and non-volatile content 98.9%, compared with conversion of OH group to acrylate 95.1 mol%, final acid value 5.4 mg-KOH/g, viscosity (Brookfield 23°) 53,600 mPas., and non-volatile content 98.2% without alc. A lacquer formulation was prepd. by addn. of 4.0% Darocure 1173 (photoinitiator) to 96.0% above acylated product, which was coated at a film thickness of 30  $\mu\text{m}$  on a glass panel and UV cured in a UV oven (20 m/min, 240 mJ/m<sup>2</sup>) using 1, 2, and 4 passages through the oven to give cured films having high surface gloss, which were conditioned at 23° and 50% relative humidity for 24 h showing film hardness 109 Ks (1 passage), 134 Ks (2 passages), and 151 Ks (4 passages).

IT 50586-59-9, TP 30

(process for prodn. of dendritic polyester acrylate  
compn. in presence of alc.)

RN 50586-59-9 HCA

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with  
2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



IC ICM C08L067-04

CC 37-6 (Plastics Manufacture and Processing)  
Section cross-reference(s): 42

ST dendritic polyester acrylate prepn lacquer

IT Alcohols, reactions

(aliph.; process for prodn. of dendritic polyester  
acrylate compn. in presence of alc.)

IT Polyesters, preparation

Polyesters, preparation

(dendrimers, acrylates, optionally polymers with  
acrylic monomers; process for prodn. of dendritic  
polyester acrylate compn. in presence of alc.)

IT Dendritic polymers

Dendritic polymers

(polyesters, acrylates, optionally polymers with acrylic  
monomers; process for prodn. of dendritic polyester  
acrylate compn. in presence of alc.)

IT Alcohols, reactions

(polyhydric; process for prodn. of dendritic  
polyester acrylate compn. in presence of alc.)

IT Glycols, reactions

Polyoxyalkylenes, reactions

(process for prodn. of dendritic polyester acrylate  
compn. in presence of alc.)

IT Lacquers

(process for prodn. of dendritic polyester acrylate  
compn. in presence of alc. useful for)

IT 77-85-0 77-99-6, Trimethylolpropane 115-77-5, reactions  
115-84-4, 2-Butyl-2-ethyl-1,3-propanediol 126-30-7 126-58-9,  
Dipentaerythritol 23235-61-2, Ditrimehyolpropane 34541-79-2,  
Ditrimehylolethane

(dendritic polyester core; process for prodn. of  
dendritic polyester acrylate compn. in presence of alc.)

IT 37314-71-9P, TP 30 acrylate  
(process for prodn. of dendritic polyester acrylate  
compn. in presence of alc.)

IT 303765-85-7P, Boltorn H 20 acrylate  
(process for prodn. of dendritic polyester acrylate  
compn. in presence of alc.)

IT 303765-86-8P, Boltorn H 20 acrylate-TP 30 acrylate copolymer  
(process for prodn. of dendritic polyester acrylate  
compn. in presence of alc.)

IT 57-55-6, 1,2-Propanediol, reactions 71-36-3, Butanol, reactions  
79-10-7, Acrylic acid, reactions 107-21-1, 1,2-Ethanediol,  
reactions 111-27-3, Hexanol, reactions 111-46-6, reactions  
111-70-6, 1-Heptanol 111-87-5, 1-Octanol, reactions 112-27-6  
112-30-1, Decanol 143-08-8, Nonanol 504-63-2, 1,3-Propylene  
glycol 4740-78-7, 5-Hydroxy-1,3-dioxane 24800-44-0, Tripropylene  
glycol 25265-71-8, Dipropylene glycol 25265-75-2, Butanediol  
25322-68-3 25322-69-4, Polypropylene glycol 25917-35-5, Hexanol  
28473-21-4, Nonanol 29063-28-3, Octanol 35296-72-1, Butanol  
36729-58-5, Decanol 50586-59-9, TP 30 53535-33-4,  
Heptanol 98025-65-1, 1,3-Dioxolan-4-ol 245662-64-0, Boltorn H 20  
(process for prodn. of dendritic polyester acrylate  
compn. in presence of alc.)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 17 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 133:242651 HCA Full-text

TI Nanocapsules based on dendritic polymers

IN Simmonnet, Jean-Thierry; Richart, Pascal

PA L'Oreal, Fr.

SO Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	EP 1034839	A1	20000913	EP 2000-400503	200002 24

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EP 1034839 B1 20001024

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,  
PT, IE, SI, LT, LV, FI, RO

FR 2790405	A1	20000908	FR 1999-2579	199903 02
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FR 2790405	B1	20010420		
US 6379683	B1	20020430	US 2000-507925	200002 22
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AT 207386	T	20011115	AT 2000-400503	200002 24
			<--	
ES 2161675	T3	20011216	ES 2000-400503	200002 24
			<--	
JP 2000256183	A	20000919	JP 2000-55402	200003 01
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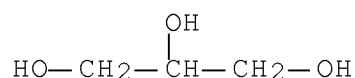
PRAI FR 1999-2579 A 19990302 <--

AB Pharmaceutical nanocapsules comprise a lipid core contg. a lipophilic active principle and a water-insol. envelop based on dendritic polymers such as polyesters with modified hydroxyl terminal. The nanocapsules are used in cosmetic and/or dermatol. compns. Boltorn H40 (a dendritic polyester) 1, capric acid/caprylic acid triglyceride contg. 10% retinol 5, Pluronic L121 in 1 g in 200 mL of acetone-ethanol mixt. was mixed under inert atm. with a soln. of 0.5g Pluronic F68 in 300 mL water. The solvents were then evapd. to obtain a final vol. of 100 mL of an aq. suspension contg. nanocapsules of av. 230 nm.

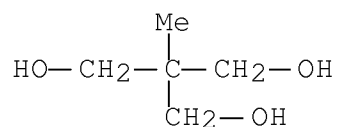
IT 56-81-5, 1,2,3-Propanetriol, uses 77-85-0  
 77-99-6, Trimethylolpropane 115-77-5, uses  
 115-77-5D, Pentaerythritol, alkoxyated  
 126-30-7 126-58-9, Dipentaerythritol  
 23235-61-2, Ditrithymololpropane 34541-79-2,  
 Ditrithymololethane 50586-59-9  
 (nanocapsules based on dendritic polymers)

RN 56-81-5 HCA

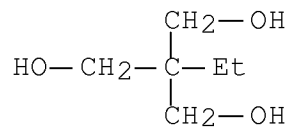
CN 1,2,3-Propanetriol (CA INDEX NAME)



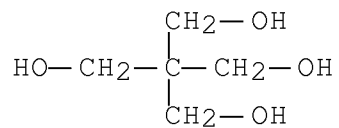
RN 77-85-0 HCA  
CN 1,3-Propanediol, 2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



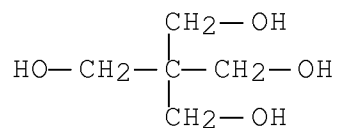
RN 77-99-6 HCA  
CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



RN 115-77-5 HCA  
CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)

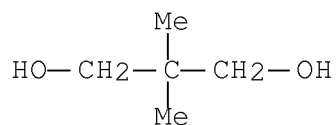


RN 115-77-5 HCA  
CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



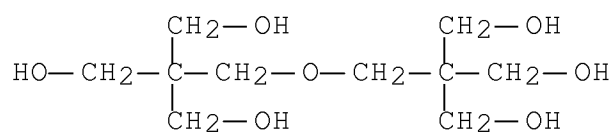
RN 126-30-7 HCA  
CN 1,3-Propanediol, 2,2-dimethyl- (CA INDEX NAME)





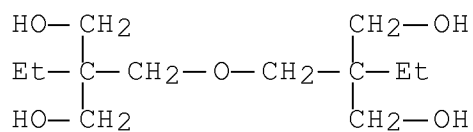
RN 126-58-9 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)- (CA INDEX NAME)



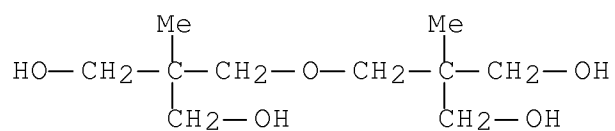
RN 23235-61-2 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-ethyl- (CA INDEX NAME)



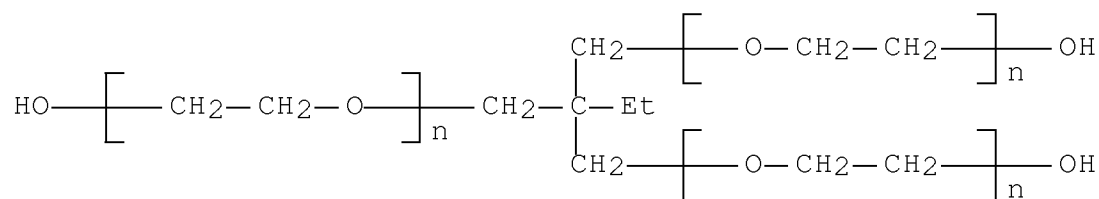
RN 34541-79-2 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-methyl- (CA INDEX NAME)



RN 50586-59-9 HCA

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



IC ICM B01J013-04  
ICS A61K007-00; A61K009-51

CC 63-6 (Pharmaceuticals)  
Section cross-reference(s): 38

ST pharmaceutical nanocapsules dendritic polymer polyester;  
cosmetic nanocapsules dendritic polymer polyester

IT Wound healing promoters  
(cicatrizants; nanocapsules based on dendritic polymers)

IT Polyesters, biological studies  
Polyesters, biological studies  
(dendrimers; nanocapsules based on dendritic polymers)

IT Cosmetics  
Drug delivery systems  
(emollients; nanocapsules based on dendritic polymers)

IT Drug delivery systems  
(emulsions; nanocapsules based on dendritic polymers)

IT Fatty acids, biological studies  
(essential; nanocapsules based on dendritic polymers)

IT Drug delivery systems  
(gels; nanocapsules based on dendritic polymers)

IT Acne  
Seborrhea  
(inhibitors; nanocapsules based on dendritic polymers)

IT Radicals, biological studies  
(inhibitors; nanocapsules based on dendritic polymers)

IT Drug delivery systems  
(lotions; nanocapsules based on dendritic polymers)

IT Cosmetics  
(moisturizers; nanocapsules based on dendritic polymers)

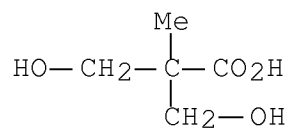
IT Anesthetics  
Anti-inflammatory agents  
Antibacterial agents  
Antihistamines

- Antiviral agents
- Catalysts
- Cosmetics
- Dyes
- Fungicides
- Oxidizing agents
- Perfumes
- Preservatives
- Sunscreens
- Surfactants
- Thickening agents
- pH
  - (nanocapsules based on dendritic polymers)
- IT Carotenes, biological studies
  - Dendritic polymers
  - Lecithins
  - Petrolatum
  - Phospholipids, biological studies
  - Vitamins
    - (nanocapsules based on dendritic polymers)
- IT Drug delivery systems
  - (nanocapsules; nanocapsules based on dendritic polymers)
- IT Skin, disease
  - (pigmentation, modifiers; nanocapsules based on dendritic polymers)
- IT Dendritic polymers
  - Dendritic polymers
    - (polyesters; nanocapsules based on dendritic polymers)
- IT 34590-77-7, 2,2-Dimethylolpropionic acid homopolymer 212335-26-7
  - (dendritic; nanocapsules based on dendritic polymers)
- IT 69-72-7D, Salicylic acid, derivs. 1406-16-2, Vitamin d 1406-18-4, Vitamin e 7235-40-7,  $\beta$ -Carotene 9003-11-6, Ethylene oxide propylene oxide copolymer 11103-57-4, Vitamin a 78418-01-6, Octanoyl-5-salicylic acid 78418-02-7 78418-03-8, n-Dodecanoyl-5-salicylic acid 127941-89-3 127941-90-6 221680-82-6, Boltorn H 30 245662-64-0, Boltorn H 40
  - (nanocapsules based on dendritic polymers)
- IT 56-81-5, 1,2,3-Propanetriol, uses 77-85-0 77-99-6, Trimethylolpropane 115-77-5, uses 115-77-5D, Pentaerythritol, alkoxylated 126-30-7 126-58-9, Dipentaerythritol 6228-25-7, 1,3-Dioxane-5,5-dimethanol 23235-61-2, Ditrimehylolpropane 34541-79-2, Ditrimehylolethane 50586-59-9
  - (nanocapsules based on dendritic polymers)

RE.CNT 7        THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 18 OF 33 HCA COPYRIGHT 2008 ACS on STN  
AN 133:193552 HCA Full-text  
TI Amphiphilic Stars and Dendrimer-Like Architectures Based  
on Poly(Ethylene Oxide) and Polystyrene  
AU Angot, Stephanie; Taton, Daniel; Gnanou, Yves  
CS Laboratoire de Chimie des Polymeres Organiques, ENSCPB-CNRS-  
Universite Bordeaux 1, Talence, 33402, Fr.  
SO Macromolecules (2000), 33(15), 5418-5426  
CODEN: MAMOBX; ISSN: 0024-9297  
PB American Chemical Society  
DT Journal  
LA English  
AB Newly designed star-shaped and dendrimer-like copolymers made of  
poly(ethylene oxide) (PEO) and polystyrene (PS) were synthesized by  
sequential anionic polymn. of ethylene oxide and atom transfer  
radical polymn. (ATRP) of styrene, the switch from the first to the  
second mechanism being obtained by selective transformation of  
"living" oxanionic sites. First, tri- and tetrafunctional initiators  
were used to anionically polymerize ethylene oxide and produce tri-  
and tetra-armed PEO stars. Next, the OH end groups of PEO star  
branches were derivatized into 2-bromopropionate groups giving rise  
to the corresponding tri- and tetrabromoester ended-PEO stars; the  
latter served as macroinitiators for the ATRP of styrene at 100 °C in  
the presence of CuBr/2,2'-bipyridine catalyst system affording  
amphiphilic star block copolymers PEO<sub>n</sub>-b-PS<sub>n</sub> (n = 3 or 4). PEO<sub>n</sub>-b-  
PS<sub>2n</sub> (n = 3 or 4) dendrimer-like copolymers constituted of an inner  
PEO part and an outer PS layer were prepd. by introducing a branching  
agent at the OH termini of the PEO arms before growing the PS  
generation by ATRP. The same branching agent was used in the prepn.  
of miktoarmed PEO-b-PS<sub>2</sub> copolymers and PS<sub>2</sub>-b-PEO-b-PS<sub>2</sub> H-type  
copolymers, starting from ω-OH and α,ω-di-OH PEO, resp. The samples  
obtained were characterized by NMR spectroscopy and size exclusion  
chromatog. equipped with a multiangle laser light scattering  
detector. These copolymers exhibited the expected structure, as  
confirmed after cleavage of the ester functions linking the PEO arm  
ends to PS moieties. Indeed, the hydrolyzed PS arms isolated were of  
low polydispersity index and their molar masses were in good  
agreement with the values calcd. by NMR on the corresponding star-  
shaped and dendrimer-like copolymers.  
IT 4767-03-7  
    (in prepn. of branching agent; prepn. and properties of  
    amphiphilic stars and dendrimer-like architectures  
    based on poly(ethylene oxide) and polystyrene)  
RN 4767-03-7 HCA

CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



IT 75-21-8, Oxirane, reactions 77-99-6,  
Trimethylolpropane 115-77-5, reactions  
(prepn. and properties of amphiphilic stars and dendrimer  
-like architectures based on poly(ethylene oxide) and  
polystyrene)

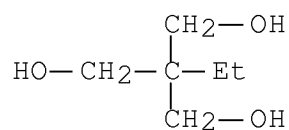
RN 75-21-8 HCA

CN Oxirane (CA INDEX NAME)



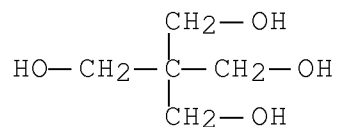
RN 77-99-6 HCA

CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



RN 115-77-5 HCA

CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 36

ST oxyethylene styrene block copolymer dendrimer  
amphiphilic star

IT Polymerization  
(anionic, living; prepn. and properties of amphiphilic stars and  
dendrimer-like architectures based on poly(ethylene  
oxide) and polystyrene)

IT Polymerization  
(atom transfer, radical; prepn. and properties of amphiphilic  
stars and dendrimer-like architectures based on  
poly(ethylene oxide) and polystyrene)

IT Polyoxyalkylenes, preparation  
(polystyrene-, block, star-shaped; prepn. and properties of  
amphiphilic stars and dendrimer-like architectures  
based on poly(ethylene oxide) and polystyrene)

IT Dendritic polymers  
(prepn. and properties of amphiphilic stars and dendrimer  
-like architectures based on poly(ethylene oxide) and  
polystyrene)

IT Polymers, preparation  
(star-branched; prepn. and properties of  
amphiphilic stars and dendrimer-like architectures  
based on poly(ethylene oxide) and polystyrene)

IT 288846-85-5P  
(branching agent; prepn. and properties of amphiphilic stars and  
dendrimer-like architectures based on poly(ethylene  
oxide) and polystyrene)

IT 563-76-8, 2-Bromopropionyl bromide 4767-03-7  
(in prepn. of branching agent; prepn. and properties of  
amphiphilic stars and dendrimer-like architectures  
based on poly(ethylene oxide) and polystyrene)

IT 42503-45-7P 50586-59-9P 226070-93-5P 226070-94-6P  
(macroinitiator; prepn. and properties of amphiphilic stars and  
dendrimer-like architectures based on poly(ethylene  
oxide) and polystyrene)

IT 75-21-8, Oxirane, reactions 77-99-6,  
Trimethylolpropane 115-77-5, reactions  
(prepn. and properties of amphiphilic stars and dendrimer  
-like architectures based on poly(ethylene oxide) and  
polystyrene)

IT 107311-90-0DP, Ethylene oxide-styrene block copolymer,  
hydrolyzed  
(star-shaped; prepn. and properties of amphiphilic  
stars and dendrimer-like architectures based on  
poly(ethylene oxide) and polystyrene)

RE.CNT 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 19 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 132:251553 HCA Full-text

TI Preparation of primary epoxides by oxidation of  $\alpha$ -alkenoic acid/polyol ester

IN Bjornberg, Hakan; Pettersson, Bo

PA Perstorp AB, Swed.

SO PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2000018751	A1	20000406	WO 1999-SE1704	19990927

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RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

SE 9803270                      A                      20000329                      SE 1998-3270

19980928

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SE 515019                      C2                      20010528

PRAI SE 1998-3270                      A                      19980928                      <--

AB A new range of epoxides having at least one primary epoxide group is obtained from esterification products having at least one primary alkenyl group, and the esterification products are prepd. when an alc. is esterified at a hydroxy:carboxyl molar ratio of 1:0.8-5, with at least one linear or branched alkenoic acid having one carboxyl group and one primary alkenyl group. The alkenyl group or groups of the esterification products is/are, after an optional removal of excess or otherwise unreacted carboxylic acid, oxidized in the presence of an effective amt. of at least one oxidizing agent to yield corresponding no. of primary epoxide groups. In a further aspect, a process for prodn. of said epoxides is provided and in yet a further aspect a curable compn. comprising at least one epoxide as provided by the present invention. Thus, an epoxide prepd. by (step

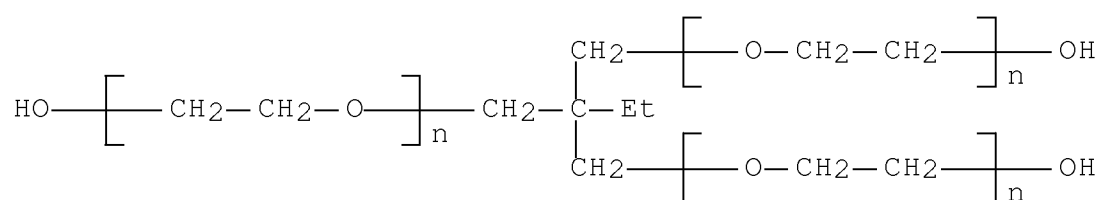
1) esterifying 5 mol of trimethylolpropane and 15 mol of 10-undecenoic acid with 3% of xylene as azeotropic solvent at 240° until an acid value of 10-12, and (step 2) oxidizing with 0.5 mol/mol unsatn. of acetic acid and 1.45 mol/mol unsatn. of hydrogen peroxide in presence of an ion exchange resin (Dowex™ M-31H) at 60° for 10 h, centrifuging, washing the org. phase, and vaporizing the solvent had mol. wt. 680, epoxy eq. 314, remaining unsatn. 21.3 I2/100 g, acid value 7.6, viscosity at 23° 176 mPa, non-volatile content 95.2% and yield 72.9%.

IT 50586-59-9DP, Ethoxylated trimethylolpropane,  
ester with 10-undecenoic acid

(in prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic  
acid/polyalc. ester)

RN 50586-59-9 HCA

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with  
2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)

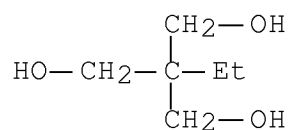


IT 77-99-6D, Trimethylolpropane, alkoxyated deriv.  
50586-59-9

(in prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic  
acid/polyalc. ester)

RN 77-99-6 HCA

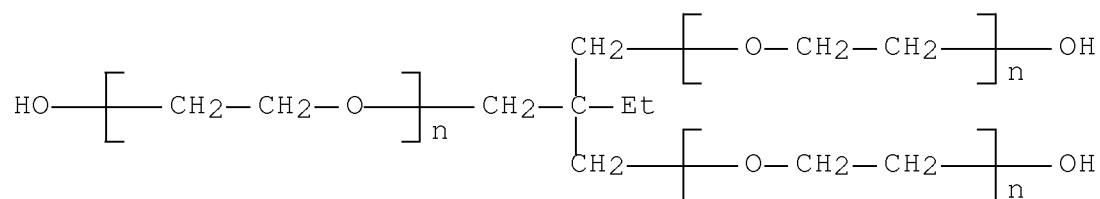
CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



RN 50586-59-9 HCA

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with  
2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)





- IC ICM C07D301-19  
ICS C07D303-38; C07D303-40; C07D303-42; C08G059-14; C08G059-20;  
C08G059-40
- CC 35-2 (Chemistry of Synthetic High Polymers)  
Section cross-reference(s): 27, 37
- ST epoxy resin primary prepn esterification oxidn; alpha alkenoic acid  
polyol esterification oxidn; undecenoic acid  
trimethylolpropane ester peroxy oxidn
- IT Esterification catalysts  
Oxidation catalysts  
(Dowex M31, acids; prepn. of primary epoxides by oxidn. of  
 $\alpha$ -alkenoic acid/polyalc. ester)
- IT Ion exchangers  
(acid catalyst; in prepn. of primary epoxides by oxidn. of  
 $\alpha$ -alkenoic acid/polyalc. ester)
- IT Carboxylic acids, uses  
(formic acid and acetic acid; in prepn. of primary epoxides by  
oxidn. of  $\alpha$ -alkenoic acid/polyalc. ester)
- IT Dendritic polymers  
(in prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic  
acid/polyalc. ester)
- IT Epoxides  
(in prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic  
acid/polyalc. ester)
- IT Peroxy acids  
(in prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic  
acid/polyalc. ester)
- IT Alcohols, reactions  
(polyhydric; in prepn. of primary epoxides by oxidn. of  
 $\alpha$ -alkenoic acid/polyalc. ester)
- IT Epoxy resins, preparation  
(prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic acid/  
polyalc. ester)
- IT Alkenes, reactions  
( $\alpha$ -, terminal carboxylic acid; in prepn. of primary  
epoxides by oxidn. of  $\alpha$ -alkenoic acid/polyalc.

ester)

IT 75-75-2, Methanesulfonic acid 104-15-4, uses 106153-00-8, Dowex M-31  
(catalyst; in prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic acid/polyalc. ester)

IT 77-99-6DP, Trimethylolpropane, ester with 10-undecenoic acid  
112-38-9DP, 10-Undecenoic acid, ester with trimethylolpropane  
50586-59-9DP, Ethoxylated trimethylolpropane,  
ester with 10-undecenoic acid 130049-52-4P 263011-96-7P  
(in prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic acid/polyalc. ester)

IT 64-18-6, Formic acid, uses 64-19-7, Acetic acid, uses 79-21-0,  
Peroxyacetic acid 93-59-4, Peroxybenzoic acid 107-32-4,  
Peroxyformic acid 359-48-8, Trifluoroperoxyacetic acid 937-14-4,  
m-Chloroperoxybenzoic acid 7722-84-1, Hydrogen peroxide, uses  
(in prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic acid/polyalc. ester)

IT 56-81-5, 1,2,3-Propanetriol, reactions 75-21-8, Oxirane, reactions  
75-56-9, reactions 77-99-6D, Trimethylolpropane,  
alkoxylated deriv. 96-09-3, Phenylethylene oxide  
115-77-5, reactions 115-84-4 126-30-7 504-63-2D,  
1,3-Propanediol, 2-alkyl derivs. 14436-32-9, 9-Decenoic acid  
26249-20-7, Butylene oxide 50586-59-9  
(in prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic acid/polyalc. ester)

IT 111044-65-6P 263011-97-8P  
(prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic acid/polyalc. ester)

IT 263011-98-9P 263011-99-0P  
(prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic acid/polyalc. ester and its use as epoxy resin)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 20 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 132:241673 HCA Full-text

TI Cosmetic or dermatologic topical compositions containing dendritic polyesters

IN Tournilhac, Florence; Simon, Pascal

PA L'oreal, Fr.

SO Eur. Pat. Appl., 10 pp.  
CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 1

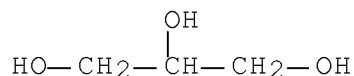
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	EP 987017	A1	20000322	EP 1999-402161	199908 31
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	EP 987017	B1	20010613		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2783417	A1	20000324	FR 1998-11634	199809 17
				<--	
	FR 2783417	B1	20020628		
	ES 2159985	T3	20011016	ES 1999-402161	199908 31
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	KR 2000022982	A	20000425	KR 1999-38070	199909 08
				<--	
	MX 9908346	A	20000831	MX 1999-8346	199909 10
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				<--	
	JP 3650553	B2	20050518		
	CN 1249169	A	20000405	CN 1999-118879	199909 16
				<--	
	BR 9904650	A	20001114	BR 1999-4650	199909 16
				<--	
	US 6287552	B1	20010911	US 1999-397517	199909 17
				<--	

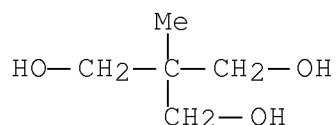
PRAI FR 1998-11634 A 19980917 <--  
AB Cosmetic or dermatol. topical compns. for application on skin, hair, and nail contain hydroxy-terminated dendritic polyesters and film-forming polymers. A cream contained ply(vinyl alc.) 1.5, dendritic

polyester (Boltron H40TMP) 0.25, glycerol 3, glyceryl stearate 1, karite oil 5, tocopherol 1, Et alc. 2, cyclomethicone 5, PEG-40 stearate 1.2, Et alc. 2, perfumes 0.4, preservatives 0.3, and water q.s. 100%.

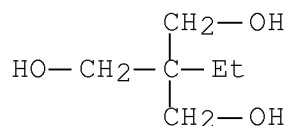
IT 56-81-5, Glycerol, biological studies 77-85-0, Trimethylolethane 77-99-6, Trimethylolpropane 77-99-6D, Trimethylolpropane, alkoxyated 99-10-5 115-77-5, Pentaerythritol, biological studies 115-77-5D, Pentaerythritol, alkoxyated 126-30-7, Neopentylglycol 126-58-9, Dipentaerythritol 2831-90-5 4767-03-7, Dimethylolpropionic acid 10097-02-6 10097-03-7 23235-61-2, Ditrithymolpropane 34541-79-2, Ditrithymolethane  
(cosmetic or dermatol. topical compns. contg. dendritic polyesters)  
RN 56-81-5 HCA  
CN 1,2,3-Propanetriol (CA INDEX NAME)



RN 77-85-0 HCA  
CN 1,3-Propanediol, 2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)

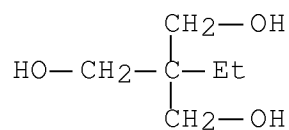


RN 77-99-6 HCA  
CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



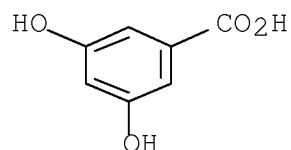
RN 77-99-6 HCA

CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



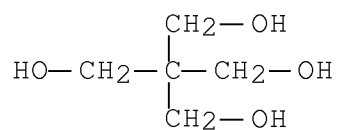
RN 99-10-5 HCA

CN Benzoic acid, 3,5-dihydroxy- (CA INDEX NAME)



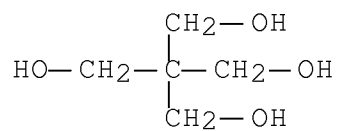
RN 115-77-5 HCA

CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



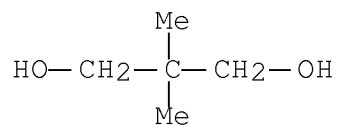
RN 115-77-5 HCA

CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



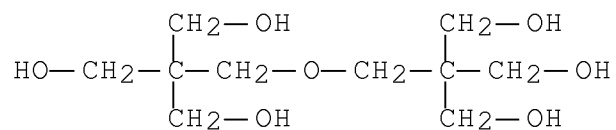
RN 126-30-7 HCA

CN 1,3-Propanediol, 2,2-dimethyl- (CA INDEX NAME)



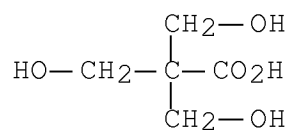
RN 126-58-9 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)- (CA INDEX NAME)



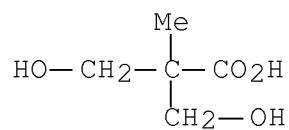
RN 2831-90-5 HCA

CN Propanoic acid, 3-hydroxy-2,2-bis(hydroxymethyl)- (CA INDEX NAME)



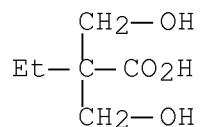
RN 4767-03-7 HCA

CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



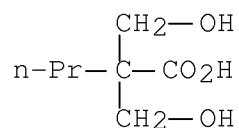
RN 10097-02-6 HCA

CN Butanoic acid, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



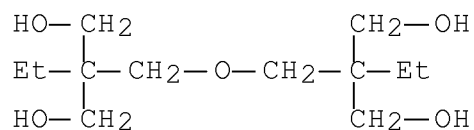
RN 10097-03-7 HCA

CN Pentanoic acid, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



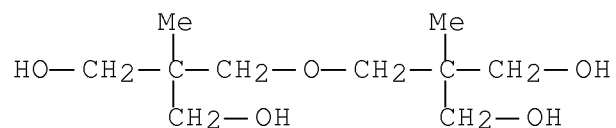
RN 23235-61-2 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-ethyl- (CA INDEX NAME)



RN 34541-79-2 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-methyl- (CA INDEX NAME)



IC ICM A61K007-48

CC 62-4 (Essential Oils and Cosmetics)

ST cosmetic cream polymer dendritic polyester

IT Polysiloxanes, biological studies

(acrylate siloxanes; cosmetic or dermatol. topical compns. contg.

dendritic polyesters)

IT Polyurethanes, biological studies  
 (acrylates; cosmetic or dermatol. topical compns. contg.  
 dendritic polyesters)

IT Anesthetics  
 Anti-inflammatory agents  
 Antihistamines  
 Antiviral agents  
 Catalysts  
 Fungicides  
 Gelation agents  
 Perfumes  
 Plasticizers  
 Preservatives  
 Sunscreens  
 Surfactants  
 Thickening agents  
 (cosmetic or dermatol. topical compns. contg. dendritic  
 polyesters)

IT Acrylic polymers, biological studies  
 Carboxylic acids, biological studies  
 Ceramides  
 Polyamides, biological studies  
 Polysiloxanes, biological studies  
 Polyureas  
 Polyurethanes, biological studies  
 Proteins, general, biological studies  
 Vitamins  
 (cosmetic or dermatol. topical compns. contg. dendritic  
 polyesters)

IT Glycols, uses  
 (cosmetic or dermatol. topical compns. contg. dendritic  
 polyesters)

IT Cosmetics  
 (creams; cosmetic or dermatol. topical compns. contg.  
 dendritic polyesters)

IT Polyesters, biological studies  
 Polyesters, biological studies  
 (dendrimers; cosmetic or dermatol. topical compns.  
 contg. dendritic polyesters)

IT Cosmetics  
 (emollients; cosmetic or dermatol. topical compns. contg.  
 dendritic polyesters)

IT Fatty acids, biological studies  
 (esters; cosmetic or dermatol. topical compns. contg.  
 dendritic polyesters)

IT Glycols, uses



- Glycols, uses
  - (ethers; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Cosmetics
  - (eye liners; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Polymers, biological studies
  - (film-forming; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Keratins
  - (formation inhibitors; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Cosmetics
  - (foundations; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Ethers, uses
  - Ethers, uses
    - (glycol; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Carboxylic acids, biological studies
  - (hydroxy; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Seborrhea
  - (inhibitors; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Radicals, biological studies
  - (inhibitors; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Cosmetics
  - (lipsticks; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Cosmetics
  - (makeups; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Cosmetics
  - (moisturizers; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Cosmetics
  - (nail lacquers; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Solvents
  - (org.; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Skin, disease
  - (pigmentation, modulators; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Polyesters, biological studies

Polyesters, biological studies  
 (polyamide-; cosmetic or dermatol. topical compns. contg.  
 dendritic polyesters)

IT Polyamides, biological studies  
 Polyamides, biological studies  
 Polyurethanes, biological studies  
 (polyester-; cosmetic or dermatol. topical compns. contg.  
 dendritic polyesters)

IT Dendritic polymers  
 Dendritic polymers  
 (polyesters; cosmetic or dermatol. topical compns. contg.  
 dendritic polyesters)

IT Polyurethanes, biological studies  
 (polyether-; cosmetic or dermatol. topical compns. contg.  
 dendritic polyesters)

IT Polyurethanes, biological studies  
 Polyurethanes, biological studies  
 (polyurea-; cosmetic or dermatol. topical compns. contg.  
 dendritic polyesters)

IT Polyureas  
 Polyureas  
 (polyurethane-; cosmetic or dermatol. topical compns. contg.  
 dendritic polyesters)

IT Fats and Glyceridic oils, biological studies  
 (vegetable; cosmetic or dermatol. topical compns. contg.  
 dendritic polyesters)

IT 98002-50-7, Airvol 540 212335-26-7  
 (cosmetic or dermatol. topical compns. contg. dendritic  
 polyesters)

IT 56-81-5, Glycerol, biological studies 77-85-0,  
 Trimethylolethane 77-99-6, Trimethylolpropane  
 77-99-6D, Trimethylolpropane, alkoxyated  
 88-12-0D, polymers with urethanes 99-10-5 115-77-5  
 , Pentaerythritol, biological studies 115-77-5D,  
 Pentaerythritol, alkoxyated 126-30-7,  
 Neopentylglycol 126-58-9, Dipentaerythritol 1825-45-2  
 2831-90-5 4767-03-7, Dimethylolpropionic acid  
 6228-25-7, 1,3-Dioxane-5,5-dimethanol 9002-89-5, Polyvinyl alcohol  
 9003-20-7, Poly(vinyl acetate) 10097-02-6  
 10097-03-7 23235-61-2, Ditrimehylolpropane  
 34541-79-2, Ditrimehylolethane  
 (cosmetic or dermatol. topical compns. contg. dendritic  
 polyesters)

IT 67-63-0, Isopropanol, uses 107-21-1D, Ethylene glycol, alkyl  
 ethers 111-46-6, Diethylene glycol, uses 111-46-6D, Diethylene  
 glycol, alkyl ethers  
 (cosmetic or dermatol. topical compns. contg. dendritic

polyesters)

RE.CNT 1        THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 21 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 132:241672 HCA Full-text

TI Antiwrinkle cosmetic containing a combination of tensor polymers  
from synthetic and/or natural origin and dendritic  
polyesters

IN Simon, Pascal; Chevalier, Veronique

PA L'oreal, Fr.

SO Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

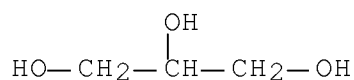
DT Patent

LA French

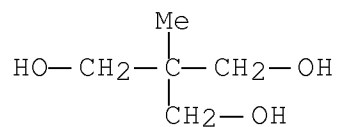
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	EP 987016	A1	20000322	EP 1999-402160	199908 31
				<--	
	EP 987016	B1	20020410		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,				
	PT, IE, SI, LT, LV, FI, RO				
	FR 2783418	A1	20000324	FR 1998-11635	199809 17
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	FR 2783418	B1	20001110		
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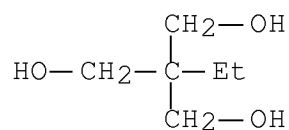
CN 1249170	A	20000405	CN 1999-118881	199909 16
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KR 2000023218	A	20000425	KR 1999-39822	199909 16
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BR 9904649	A	20001114	BR 1999-4649	199909 16
			<--	
US 6284233	B1	20010904	US 1999-397521	199909 17
			<--	
PRAI FR 1998-11635	A	19980917	<--	
AB	Antiwrinkle compns. contain a combination of tensor polymers from synthetic and/or natural origin capable of forming a permeable film after application of a 7% soln. on skin, having Young modulus of 108-10 N/m <sup>2</sup> , and dendritic polyesters. An antiwrinkle cream contained cetyl alc. 1.5, vaseline oil 5, cyclomethicone 7, sorbitan tristearate 1.3, PEG 40 stearate 2.7, soya protein 2.7, Sancure 2060 10, Boltorn H 40 TMP 0.2, Et alc. 10, perfumes, preservatives and water q.s. 100%.			
IT	56-81-5, Glycerol, biological studies 77-85-0, Trimethylolpropane 77-99-6, Trimethylolpropane 77-99-6D, Trimethylolpropane, alkoxylated 99-10-5 115-77-5, Pentaerythritol, biological studies 115-77-5D, Pentaerythritol, alkoxylated 126-30-7, Neopentylglycol 126-58-9, Dipentaerythritol 2831-90-5 4767-03-7, Dimethylolpropionic acid 10097-02-6 10097-03-7 23235-61-2, Ditrimehylolpropane 34541-79-2, Ditrimehylolpropane (antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)			
RN	56-81-5 HCA			
CN	1,2,3-Propanetriol (CA INDEX NAME)			



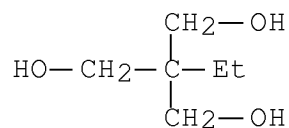
RN 77-85-0 HCA  
CN 1,3-Propanediol, 2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



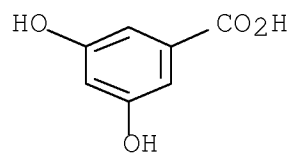
RN 77-99-6 HCA  
CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



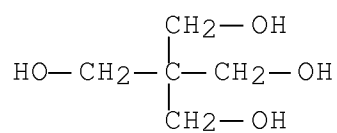
RN 77-99-6 HCA  
CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



RN 99-10-5 HCA  
CN Benzoic acid, 3,5-dihydroxy- (CA INDEX NAME)

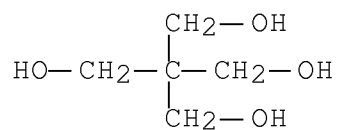


RN 115-77-5 HCA  
CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



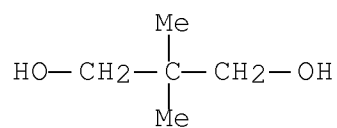
RN 115-77-5 HCA

CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



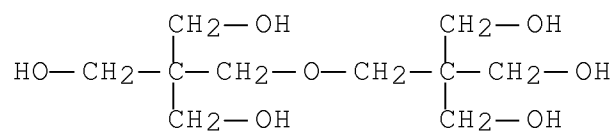
RN 126-30-7 HCA

CN 1,3-Propanediol, 2,2-dimethyl- (CA INDEX NAME)



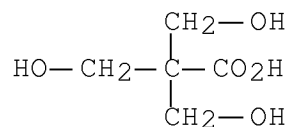
RN 126-58-9 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)- (CA INDEX NAME)



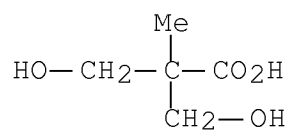
RN 2831-90-5 HCA

CN Propanoic acid, 3-hydroxy-2,2-bis(hydroxymethyl)- (CA INDEX NAME)



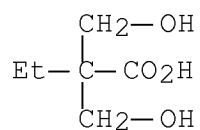
RN 4767-03-7 HCA

CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



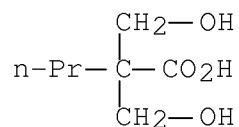
RN 10097-02-6 HCA

CN Butanoic acid, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



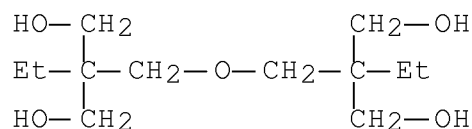
RN 10097-03-7 HCA

CN Pentanoic acid, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)

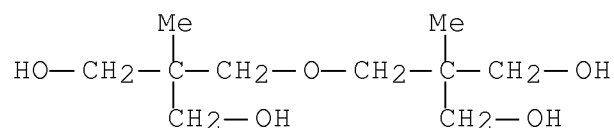


RN 23235-61-2 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-ethyl- (CA INDEX NAME)]



RN 34541-79-2 HCA  
 CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-methyl- (CA INDEX  
 NAME)



IC ICM A61K007-48  
 CC 62-4 (Essential Oils and Cosmetics)  
 ST antiwrinkle cosmetic polymer dendritic polyester  
 IT Resins  
 (Manila elemi; antiwrinkle cosmetic contg. combination of tensor  
 polymers from synthetic and/or natural origin and  
 dendritic polyesters)  
 IT Wheat  
 (Spelta Group, ext.; antiwrinkle cosmetic contg. combination of  
 tensor polymers from synthetic and/or natural origin and  
 dendritic polyesters)  
 IT Polyurethanes, biological studies  
 (acrylates; antiwrinkle cosmetic contg. combination of tensor  
 polymers from synthetic and/or natural origin and  
 dendritic polyesters)  
 IT Bean (Phaseolus vulgaris)  
 Catalysts  
 Gelation agents  
 Pea  
 Perfumes  
 Plasticizers  
 Preservatives  
 Rye  
 Sunscreens  
 Surfactants  
 Thickening agents  
 Wheat



(antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Acrylic polymers, biological studies  
 Carboxylic acids, biological studies  
 Ceramides  
 Polymers, biological studies  
 Polysiloxanes, biological studies  
 Polyureas  
 Polyurethanes, biological studies  
 Retinoids  
 Shellac  
 Vitamins  
 (antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Resins  
 (copals; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Cosmetics  
 (creams; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Polyesters, biological studies  
 Polyesters, biological studies  
 (dendrimers; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Cyclosiloxanes  
 (di-Me; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Proteins, general, biological studies  
 (egg; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Cosmetics  
 (emollients; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Lentil  
 (ext., antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Corn  
 Lupine (Lupinus)

Sesame (*Sesamum indicum*)  
 Soybean (*Glycine max*)  
 (ext.; antiwrinkle cosmetic contg. combination of tensor polymers  
 from synthetic and/or natural origin and dendritic  
 polyesters)

IT    Cosmetics  
 (gels; antiwrinkle cosmetic contg. combination of tensor polymers  
 from synthetic and/or natural origin and dendritic  
 polyesters)

IT    Keratins  
 (hydrolyzates; antiwrinkle cosmetic contg. combination of tensor  
 polymers from synthetic and/or natural origin and  
 dendritic polyesters)

IT    Carboxylic acids, biological studies  
 (hydroxy; antiwrinkle cosmetic contg. combination of tensor  
 polymers from synthetic and/or natural origin and  
 dendritic polyesters)

IT    Radicals, biological studies  
 (inhibitors; antiwrinkle cosmetic contg. combination of tensor  
 polymers from synthetic and/or natural origin and  
 dendritic polyesters)

IT    Cosmetics  
 (lotions; antiwrinkle cosmetic contg. combination of tensor  
 polymers from synthetic and/or natural origin and  
 dendritic polyesters)

IT    Cosmetics  
 (moisturizers; antiwrinkle cosmetic contg. combination of tensor  
 polymers from synthetic and/or natural origin and  
 dendritic polyesters)

IT    Polyurethanes, biological studies  
 (polyester-; antiwrinkle cosmetic contg. combination of tensor  
 polymers from synthetic and/or natural origin and  
 dendritic polyesters)

IT    Dendritic polymers  
 Dendritic polymers  
 (polyesters; antiwrinkle cosmetic contg. combination of tensor  
 polymers from synthetic and/or natural origin and  
 dendritic polyesters)

IT    Polyurethanes, biological studies  
 (polyether-; antiwrinkle cosmetic contg. combination of tensor  
 polymers from synthetic and/or natural origin and  
 dendritic polyesters)

IT    Resins  
 (sandarac; antiwrinkle cosmetic contg. combination of tensor  
 polymers from synthetic and/or natural origin and  
 dendritic polyesters)

IT    Proteins, general, biological studies

(soybean; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Cosmetics

(sticks; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Skin

(stratum corneum; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Fats and Glyceridic oils, biological studies

(vegetable; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Cosmetics

(wrinkle-preventing; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT 9011-16-9, Antaron ST 06 159778-06-0, Sancure 815 212335-26-7  
(antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

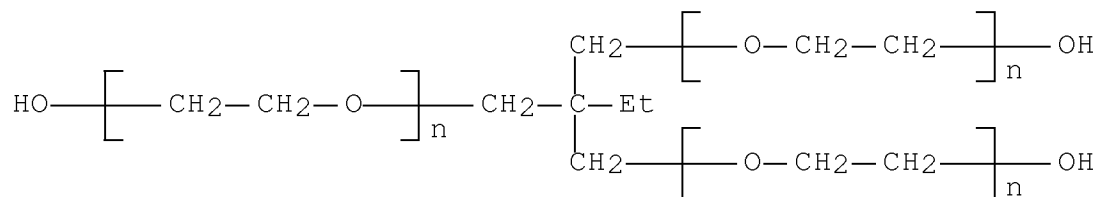
IT 56-81-5, Glycerol, biological studies 77-85-0,  
Trimethylolethane 77-99-6, Trimethylolpropane  
77-99-6D, Trimethylolpropane, alkoxyated  
88-12-0D, polymers with urethanes 99-10-5 115-77-5  
, Pentaerythritol, biological studies 115-77-5D,  
Pentaerythritol, alkoxyated 121-91-5D, Isophthalic  
acid, polymers 126-30-7, Neopentylglycol 126-58-9  
, Dipentaerythritol 1398-61-4, Chitin 1825-45-2  
2831-90-5 4767-03-7, Dimethylolpropionic acid  
6228-25-7, 1,3-Dioxane-5,5-dimethanol 9003-05-8, Polyacrylamide  
9004-34-6D, Cellulose, derivs., biological studies 9012-76-4,  
Chitosan 10097-02-6 10097-03-7  
23235-61-2, Ditrimethylolpropane 34541-79-2,  
Ditrimethylolethane 66267-50-3, Chitosan lactate 78809-92-4D,  
derivs. 83512-85-0D, Carboxymethylchitosan, succinamide derivs.  
84069-44-3, Hydroxypropyl chitosan 84563-76-8, Chitosan glutamate  
(antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI Aqueous urethane/acrylic resins with branched  
 chain extension and coating compositions  
 IN Swarup, Shanti; Natesh, Anbazhagan; Fortuna, Norene E.; Olson, Kurt  
 G.  
 PA PPG Industries, Inc., USA  
 SO U.S., 12 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5854332	A	19981229	US 1996-771194	19961220

PRAI US 1996-771194 19961220 <--  
 AB Aq. dispersions of urethane polymers and vinyl polymers (e.g.,  
 acrylics) that provide water-based coating compns. with good adhesion  
 following humidity exposure are further improved by providing  
 branching chain extension of the polyurethane. The branched polymers  
 provide improved metallic pigment orientation in coating compns.  
 Branching is provided by the use of chain extending agents selected  
 from polyamines having at least three primary amine groups and  
 polyols having at least three hydroxyl groups. The vinyl monomers  
 are polymd. in the presence of the aqueously dispersed polyurethane.  
 IT 50586-59-9DF, TP-30, polyurethanes  
 (aq. urethane/acrylic resins with branched  
 chain extension and coating compns.)  
 RN 50586-59-9 HCA  
 CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with  
 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



IC ICM C08J003-05  
 ICS C08J003-03; C08L075-04; C09D175-04  
 INCL 524507000

CC 42-10 (Coatings, Inks, and Related Products)

IT Fatty acids, uses  
(C9-11-branched, glycidyl esters, polyurethanes; aq. urethane/acrylic resins with branched chain extension and coating compns.)

IT Polyurethanes, uses  
(aq. urethane/acrylic resins with branched chain extension and coating compns.)

IT Coating materials  
(aq.; aq. urethane/acrylic resins with branched chain extension and coating compns.)

IT 106-91-2DP, Glycidyl methacrylate, polyurethanes 4767-03-7DP, Dimethylol propionic acid, polyurethanes 5124-30-1DP, polyurethanes 25852-37-3P, Butyl acrylate-methyl methacrylate copolymer 39423-51-3DP, JEFFAMINE T403, polyurethanes 50586-59-9DP, TP-30, polyurethanes 79103-62-1DP, Desmodur W, polyurethanes 150872-29-0DP, EMPOL 1008, polyurethanes 219136-15-9P  
(aq. urethane/acrylic resins with branched chain extension and coating compns.)

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 23 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 126:239182 HCA Full-text

OREF 126:46281a,46284a

TI Manufacture and uses of photocurable synthetic polymer compositions

IN Saito, Takao; Maeda, Kohei; Ozasa, Naoshi

PA Sanyo Chemical Industries Ltd., Japan

SO Ger. Offen., 31 pp.  
CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
PI	DE 19632122	A1	19970213	DE 1996-19632122	199608 08
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	DE 19632122	B4	20080529		
	JP 10007754	A	19980113	JP 1996-227476	199608 08
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	JP 2881134	B2	19990412		

US 5902837

A

19990511

US 1996-693638

199608  
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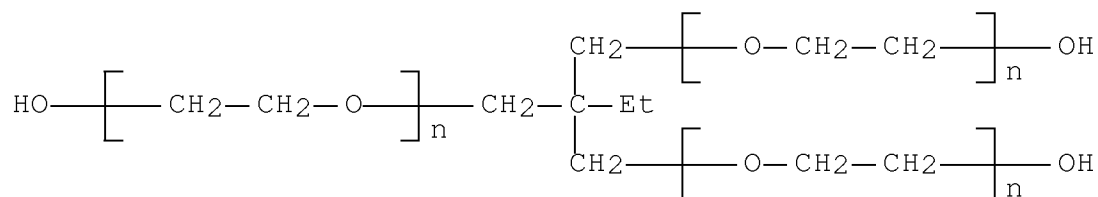
PRAI JP 1995-225695 A 19950809 <--  
 JP 1995-351791 A 19951225 <--  
 JP 1996-129028 A 19960424 <--  
 JP 1996-129029 A 19960424 <--  
 JP 1996-131290 A 19960426 <--

AB Rapidly cured title compns. comprise (A) compds. having a ( branched) polymer structure with a polyether-, polyvinyl-, polyester-, polyurethane-, polyamide-, polycarbonate-, and novolak-type main chain contg.  $\geq 5$ , preferably  $\geq 10$  2-propenyloxy groups, and having mol. wt.  $\geq 1000$ , and (B) a cationic photopolymn. initiator, e.g., a triarylsulfonium or diaryliodonium salt. Crosslinked title compns. and photoresists for printed circuit boards, printing inks, paper and metal coatings, optical fiber coatings, and adhesives contg. the compns. are also claimed. In a typical example, epichlorohydrin was polymd. with  $\text{BF}_3 \cdot \text{Et}_2\text{O}$ , the polymer was etherified with polyethylene glycol monoallyl ether (prepn. given) in PhMe in the presence of KOH and Bu<sub>4</sub>NBr, the reaction mixt. heated to 170° to produce a rearranged, 2-propenyloxy-terminated product which (80 parts) was combined with 20 parts  $\text{MeCH}:\text{CHO}(\text{CH}_2\text{CH}_2\text{O})_6\text{H}$  (prepn. given) and 5 parts UVR 6974 (photopolymn. initiator). When coated (20  $\mu\text{m}$ ) on a Cu plate and UV-irradiated, the above compn. required minimal energy input of 20 mJ/cm<sup>2</sup> to give a coating with pencil hardness H and good adhesion to the substrate.

IT 50586-59-9DP, Polyethylene glycol trimethylolpropane ether, allyl ethers rearranged to 2-propenyl ethers, polymers (UV-cured; manuf. and uses of photocurable synthetic polymer compns.)

RN 50586-59-9 HCA

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



IC ICM C08L029-10

ICS C08F116-20; C08F216-20; C08J003-28; C09D005-03; C09D011-10;

C09D129-10; C09J129-10; G03F007-027; B05D007-16; C07C043-16

ICA C08J003-28

ICI C08L023-26, C08L061-06, C08L067-07, C08L069-00, C08L071-02,  
C08L075-16, C08L077-00

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 38, 42, 74

IT 4098-71-9DP, Isophorone diisocyanate, reaction products with  
2-propenyl-terminated polyoxyalkylenes, polymers 9002-89-5DP,  
Poly(vinyl alcohol), allyl ethers rearranged to 2-propenyl ethers,  
polymers with polyethylene glycol mono(2-propenyl) ether  
24969-06-0DP, Polyepichlorohydrin, allyl ethers rearranged to  
2-propenyl ethers, polymers with polyethylene glycol  
mono(2-propenyl) ether 25249-16-5DP, 2-Hydroxyethyl methacrylate  
polymer, allyl ethers rearranged to 2-propenyl ethers, polymers with  
polyethylene glycol mono(2-propenyl) ether 25722-70-7DP,  
Polyglycide, allyl ethers rearranged to 2-propenyl ethers, polymers  
with polyethylene glycol mono(2-propenyl) ether 25723-16-4DP,  
Polypropylene glycol trimethylolpropane ether, allyl ethers  
rearranged to 2-propenyl ethers, polymers 25791-96-2DP,  
Polypropylene glycol glycerol ether, allyl ethers rearranged to  
2-propenyl ethers, polymers 26022-14-0DP, 2-Hydroxyethyl acrylate  
polymer, allyl ethers rearranged to 2-propenyl ethers, polymers with  
polyethylene glycol mono(2-propenyl) ether 26282-59-7DP, Allyl  
glycidyl ether-Ethylene oxide copolymer, allylic rearrangement  
products, reaction products with isophorone diisocyanate and  
polyethylene glycol 2-propenyl monoether, polymers 26471-62-5DP,  
TDI, reaction products with polyethylene glycol 2-propenyl monoether  
and hydroxyethyl acrylate, polymers 27274-31-3DP, Polyethylene  
glycol monoallyl ether, ethers with polyepichlorohydrin, allylic  
rearrangement products, polymers 27274-31-3DP, polymers with  
2-propenyl ethers of hydroxy-contg. polymers 31694-55-0DP, allyl  
ethers rearranged to 2-propenyl ethers, polymers  
50536-59-9DP, Polyethylene glycol trimethylolpropane ether,  
allyl ethers rearranged to 2-propenyl ethers, polymers  
50977-32-7DP, allyl ethers rearranged to 2-propenyl ethers, polymers  
with polyethylene glycol 2-propenyl monoether 52683-23-5P  
156932-43-3DP, allyl ethers, allylic rearrangement products,  
polymers with polyethylene glycol 2-propenyl monoether  
188405-63-2P, Adipic acid-triethylene glycol-polyethylene glycol  
monoallyl ether copolymer 188405-64-3P 188405-66-5P  
188448-16-0P 188451-04-9DP, allylic rearrangement products,  
polymers with polyethylene glycol 2-propenyl monoether  
(UV-cured; manuf. and uses of photocurable synthetic polymer  
compns.)

IT 107-05-1, Allyl chloride  
(etherification of ethoxylated polyols;  
manuf. and uses of photocurable synthetic polymer compns.)

IT 56-81-5, 1,2,3-Propanetriol, reactions 126-58-9, Dipentaerythritol  
(ethoxylation and etherification with allyl chloride;  
manuf. and uses of photocurable synthetic polymer compns.)

IT 75-21-8, Oxirane, reactions  
(ethoxylation of glycerol; manuf. and uses of  
photocurable synthetic polymer compns.)

IT 77-99-6  
(ethoxylation of; manuf. and uses of photocurable  
synthetic polymer compns.)

IT 25249-16-5P, 2-Hydroxyethyl methacrylate polymer 26022-14-0P,  
2-Hydroxyethyl acrylate polymer 156932-43-3P, Ethoxylated  
2-hydroxyethyl acrylate  
(prepn. and etherification with allyl chloride; manuf. and uses  
of photocurable synthetic polymer compns.)

IT 75-56-9, reactions  
(propoxylation of glycerol; manuf. and uses of  
photocurable synthetic polymer compns.)

L73 ANSWER 24 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 125:169601 HCA Full-text

OREF 125:31775a,31778a

TI Manufacture of hyperbranched, polyoxyethylene-polyesters and  
thermosetting compositions

IN Soerensen, Kent; Pettersson, Bo; Boogh, Louis; Maansson, Jan-Anders  
Edvin

PA Perstorp Ab, Swed.

SO PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 9619537	A1	19960627	WO 1995-SE1491	199512 12

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W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES,  
FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU,  
LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,  
SI, SK, TJ, TM, TT

RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR,  
IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN,  
ML, MR, NE, SN, TD, TG

SE 9404440 A 19960622 SE 1994-4440

199412



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SE 503622	C2	19960724			
AU 9643202	A	19960710	AU 1996-43202		
					199512
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CA 2206004	A1	19960727	CA 1995-2206004		
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CA 2206004	C	20070605			
EP 799279	A1	19971008	EP 1995-941957		
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EP 799279	B1	20010328			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,					
PT, IE					
JP 10500730	T	19980120	JP 1996-519716		
					199512
					12
			<--		
JP 3117219	B2	20001211			
AT 200098	T	20010415	AT 1995-941957		
					199512
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ES 2156956	T3	20010801	ES 1995-941957		
					199512
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			<--		
TW 396192	B	20000701	TW 1995-84113675		
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HK 1003057	A1	20010831	HK 1998-102212		
					199803
					17
			<--		
PRAI SE 1994-4440	A	19941221	<--		
WO 1995-SE1491	W	19951212	<--		
AB	The present invention relates to a thermosetting material wherein the matrix comprises $\geq 1$ dendritic or hyperbranched macromol. having a chain termination providing $\geq 1$ primary or secondary reactive site, combined with $\geq 1$ conventional thermosetting resin or aliph., cycloaliph. or arom. monomeric or polymeric compd. A process for the				

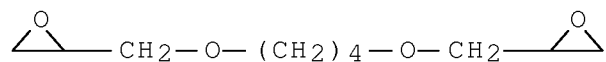
manuf. of the title materials and a thermosetting resin compn. providing the matrix or part of the matrix of this material, esp. useful for composites, are also claimed. A typical title polymer was prepd. by esterification of ethoxylated pentaerythritol with 2,2-dimethylolpropionic acid (I), addn. of a 3d generation to the resulting dendrimer by esterification with I, and etherification of the product with epichlorohydrin. A blend of the resulting hyperbranched macromol. glycidyl ether with a com. bisphenol F-based epoxy resin (Araldite LY 5082) was prepd. and cured with isophorone diamine catalyst.

IC ICM C08L067-06  
ICS C08J005-04; C08J005-24  
CC 37-3 (Plastics Manufacture and Processing)  
ST polyoxyethylene polyester hyperbranched manuf; pentaerythritol  
ethoxylate esterification dimethylolpropionate  
starburst polymer; dendrimer  
pentaerythritol ethoxylate esterification  
dimethylolpropionic acid; epichlorohydrin etherification  
hyperbranched polyoxyethylene polyester; polyester polyoxyethylene  
dendritic glycidyl ether manuf; epoxy resin blend hyperbranched  
polyoxyethylene polyester  
IT 75-13-8D, Isocyanic acid, esters, polymers  
(blends with epoxidized hyperbranched polyoxyethylene-polyester;  
manuf. and derivatization of polyoxyethylene-polyesters and  
thermosetting compns.)  
IT 106-89-8DP, Epichlorohydrin, reaction products with ethoxylated  
polyols  
(hyperbranched, epoxy resin blend; dendritic, manuf. and  
derivatization of polyoxyethylene-polyesters and thermosetting  
compns.)  
IT 34590-77-7P  
(manuf. and esterification with 2,2-dimethylolpropionic  
acid; dendritic, manuf. and derivatization of  
polyoxyethylene-polyesters and thermosetting compns.)

L73 ANSWER 25 OF 33 HCA COPYRIGHT 2008 ACS on STN  
AN 124:30634 HCA Full-text  
OREF 124:5895a  
TI Preparing grit-reducing aqueous polymer emulsions  
IN Jenkins, Richard Duane; Bassett, David Robinson; Sterlen, Ralph  
Andrew, Jr.; Daniels, Wendy Batts  
PA Union Carbide Chemicals and Plastics Technology Corp., USA  
SO PCT Int. Appl., 70 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO. ----- -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
PI	WO 9500565	A1	19950105	WO 1994-US6998	199406 20
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	US 5399618	A	19950321	US 1993-83896	199306 28
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	CA 2166195	A1	19950105	CA 1994-2166195	199406 20
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	CA 2166195	C	20001003		
	AU 9473152	A	19950117	AU 1994-73152	199406 20
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	AU 702693	B2	19990304		
	EP 706535	A1	19960417	EP 1994-923219	199406 20
	<--				
	EP 706535	B1	19970625		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 08512064	T	19961217	JP 1995-503037	199406 20
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	AT 154812	T	19970715	AT 1994-923219	199406 20
	<--				
	ES 2105737	T3	19971016	ES 1994-923219	199406 20
	<--				
	US 5436292	A	19950725	US 1994-342147	199411 18

			<--	
US 5476900	A	19951219	US 1995-414005	199503 17
			<--	
US 5561189	A	19961001	US 1995-521420	199508 30
			<--	
NO 9505315	A	19960220	NO 1995-5315	199512 27
			<--	
FI 9506274	A	19960227	FI 1995-6274	199512 27
			<--	
US 5629375	A	19970513	US 1996-663892	199606 14
			<--	
PRAI	US 1993-83896	A	19930628	<--
	WO 1994-US6998	W	19940620	<--
	US 1994-342147	A3	19941118	<--
	US 1995-414005	A3	19950317	<--
	US 1995-521420	A3	19950830	<--
AB	The title polymers useful as thickening agents in aq. compns., e.g. latex paints, (no data) which are sol. in, or swelled by, an aq. alk. medium are prepd. by polymn. of (a) ethylenically unsatd. carboxylic acid 1-99.8, (b) monomers different from (a) 0-98.8, (c) unsatd. macromonomers not of (a) or (b) 0.1-98.9, (d) other unsatd. monomer 0-20, and (e) $\geq 1$ (meth)acrylates of strong acid or its salt in an amt. to reduce plating and/or grit formation. A mixt. of Et acrylate 150, methacrylic acid 120, the macromonomer resulting from the reaction of m-TMI and 1,3-bis(nonylphenoxy)-2- propanol ethoxylate (20 mol EO) 30, and 2-sulfoethyl methacrylate 3 g was emulsion polyemd. to give a potential graft polymer thickener.			
IT	2425-79-8DP, reaction products with nonylphenoxypropanol, ethoxylated (precursor of macromer for manuf. of acrylic polyoxyalkylene)			
RN	2425-79-8 HCA			
CN	Oxirane, 2,2'-[1,4-butanediylbis(oxymethylene)]bis- (CA INDEX NAME)			



IC ICM C08F220-04  
 ICS C08F299-00; C09D007-12  
 CC 35-4 (Chemistry of Synthetic High Polymers)  
 Section cross-reference(s): 37, 42  
 IT 158916-17-7P  
 (precursor of dendritic by divergent approach;  
 precursor of macromer for manuf. of acrylic polyoxyalkylene)  
 IT 2425-79-8DP, reaction products with nonylphenoxypropanol,  
 ethoxylated 25265-27-4P, Poly(phenyl glycidyl ether)  
 156609-83-5P 156647-52-8P 156798-74-2DP, sulfated 156798-74-2P  
 (precursor of macromer for manuf. of acrylic polyoxyalkylene)

L73 ANSWER 26 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 119:181545 HCA Full-text

OREF 119:32479a,32482a

TI Polyester-type dendritic macromolecules, and their  
 manufacture and use

IN Hult, A.; Malmstroem, E.; Johansson, M.; Soerensen, K.

PA Perstorp AB, Swed.

SO Swed., 20 pp.

CODEN: SSXXAY

DT Patent

LA Swedish

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SE 468771	B	19930315	SE 1992-564	199202 26
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SE 9200564	A	19930315		
SE 468771	C	19930715		
WO 9317060	A1	19930902	WO 1993-SE148	199302 24
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RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
AU 9336530	A	19930913	AU 1993-36530	199302 24

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EP 630389	A1	19941228	EP 1993-905712
			199302
			24

EP 630389                      B1            19980429  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL,  
PT, SE  
JP 07504219                      T            19950511            JP 1993-514755

199302  
24

JP 2574201                      B2              19970122  
AT 165609                      T              19980515              AT 1993-905712

199302  
24

ES 2115762 T3 19980701 ES 1993-905712 199302  
24

CA 2117486 C 19980922 CA 1993-2117486 199302  
24

US 5418301                      A                      19950523                      US 1994-256493

199407

13

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PRAI SE 1992-564      A      19920226  <--
      WO 1993-SE148    A      19930224  <--
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AB The macromols., consisting of a central initiator mol. or polymer contg.  $\geq 1$  reactive groups (A), which groups A are bonded with reactive groups (B) of a chain-lengthening monomer to form a 1st, both A and B group-contg. treelike structure that may be further lengthened and branched out from the initiator mol. or polymer by addnl. monomeric chain-lengtheners via bonding to the A and B groups, and, optionally, also further lengthened by reaction with a chain stopper, A and B are hydroxyl A and carboxyl groups, resp., and the chain-lengthening monomer contains a group B and  $\geq 2$  groups A or hydroxyalkyl-substituted A. The macromols. are manufd. by reacting an initiator mol. or polymer contg.  $\geq 1$  hydroxyl groups at 0-280, preferably 100-250°, with a chain-lengthening monomer contg. a group B and  $\geq 2$  groups A or hydroxyalkyl-substituted A, after which the reaction products may be reacted with a chain stopper. The macromols. are used as components in alkyd resins, satd. and unsatd. polyesters, epoxy resins, polyurethanes, UV-curable binders, dental

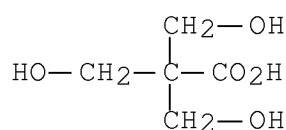
materials, lubricants, microlithog. pigments, powd. binders, and amino resins. To 1.0 mol di-trimethylolpropane were added, under flowing Ar and at 120°, 8.0 mol dimethylolpropionic acid and 0.12 mol p-toluenesulfonic acid, and the reaction was carried out at 140° for 2 h, after which 8.0 mol lauric acid were added and the reaction continued for 2 h to give a polyester having viscosity 10 Pa.s at 23°. Addn. of 4.0 and 12.0 mol lauric acid gave viscosity 1037 and 1.5 Pa.s, resp.

IT 2831-90-5 4767-03-7 10097-02-6  
10097-03-7

(chain-lengthening agent, in dendritic polyester  
manuf., for dental materials and paints)

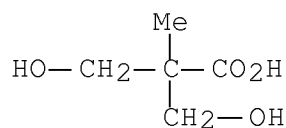
RN 2831-90-5 HCA

CN Propanoic acid, 3-hydroxy-2,2-bis(hydroxymethyl)- (CA INDEX NAME)



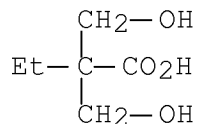
RN 4767-03-7 HCA

CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



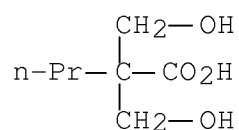
RN 10097-02-6 HCA

CN Butanoic acid, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



RN 10097-03-7 HCA

CN Pentanoic acid, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)

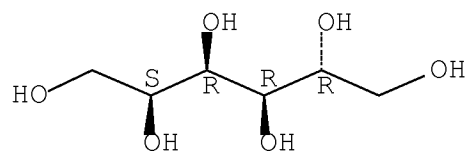


IT 50-70-4DP, D-Glucitol, dendritic polyesters with carboxylic acids 56-81-5DP, 1,2,3-Propanetriol, dendritic polyesters with carboxylic acids 69-65-8DP, Mannitol, dendritic polyesters with carboxylic acids 75-21-8DP, Oxirane, reaction products with alcs., dendritic polyesters with carboxylic acids 75-56-9DP, reaction products with alcs., dendritic polyesters with carboxylic acids 77-85-0DP, Trimethylolethane, dendritic polyesters with carboxylic acids 115-77-5DP, dendritic polyesters with carboxylic acids 126-30-7DP, dendritic polyesters with carboxylic acids 126-58-9DP, Dipentaerythritol, dendritic polyesters with carboxylic acids 23235-61-2DP, Di-trimethylolpropane, dendritic polyesters with carboxylic acids 34541-79-2DP, Di-trimethylolethane, dendritic polyesters with carboxylic acids  
(manuf. of, for dental materials and paints)

RN 50-70-4 HCA

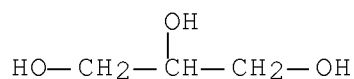
CN D-Glucitol (CA INDEX NAME)

Absolute stereochemistry.



RN 56-81-5 HCA

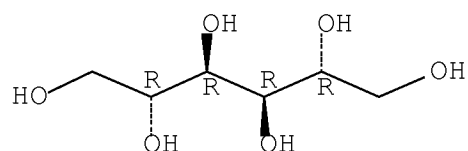
CN 1,2,3-Propanetriol (CA INDEX NAME)





RN 69-65-8 HCA  
 CN D-Mannitol (CA INDEX NAME)

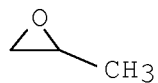
Absolute stereochemistry.



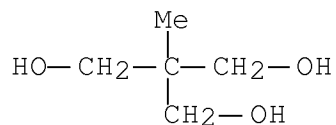
RN 75-21-8 HCA  
 CN Oxirane (CA INDEX NAME)



RN 75-56-9 HCA  
 CN Oxirane, 2-methyl- (CA INDEX NAME)

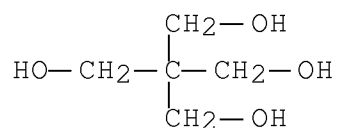


RN 77-85-0 HCA  
 CN 1,3-Propanediol, 2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



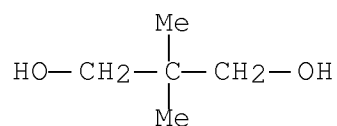
RN 115-77-5 HCA

CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



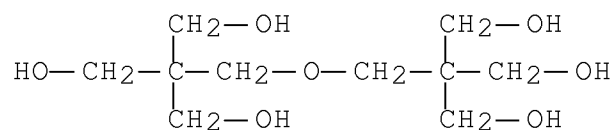
RN 126-30-7 HCA

CN 1,3-Propanediol, 2,2-dimethyl- (CA INDEX NAME)



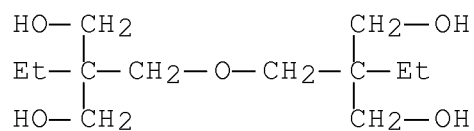
RN 126-58-9 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)- (CA INDEX NAME)



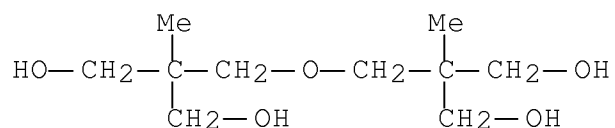
RN 23235-61-2 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-ethyl- (CA INDEX NAME)



RN 34541-79-2 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-methyl- (CA INDEX NAME)



- IC ICM C08G063-02
- ICS C08G063-20
- CC 35-5 (Chemistry of Synthetic High Polymers)
- Section cross-reference(s): 63
- ST dendritic polyester; ditrimethylolpropane  
dimethylolpropionic acid dendritic polyester; lauric acid  
chain stopper polyester; alkyd resin dendritic polyester;  
epoxy resin dendritic; urethane polymer dendritic  
polyester; UV curable polymer dendritic polyester; dental  
material dendritic polyester; lubricant dendritic  
polyester; microlithog pigment dendritic polyester; powd  
binder dendritic polyester; amino resin dendritic  
polyester
- IT Binding materials
- Lubricants  
(UV-curable, dendritic polyester manuf. for, for dental  
materials and paints)
- IT Aminoplasts  
(dendritic polyester manuf. for)
- IT Epoxy resins, uses
- Urethane polymers, uses  
(dendritic polyester manuf. for, for dental materials  
and paints)
- IT Alkyd resins  
(dendritic polyester manuf. for, for dental materials  
and paints)
- IT Lewis acids  
(esterification catalyst, polymn. in presence of, in  
dendritic polyester manuf. for dental materials and  
paints)
- IT Titanates  
(esterification catalysts, polymn. in presence of, in  
dendritic polyester manuf. for dental materials and  
paints)
- IT Onium compounds  
(polymn. catalysts contg., in dendritic polyester  
manuf. for dental materials and paints)
- IT Esterification catalysts

(polymn. in presence of, in dendritic polyester manuf.  
for dental materials and paints)

IT Dendritic polymers  
(polyesters, starburst, manuf. and uses of)

IT Polyesters, preparation  
(starburst dendrimers, manuf. and uses of)

IT 42978-66-5, Tripropyleneglycol diacrylate  
(acrylic oligomers UV hardening with, in dendritic  
polyester manuf. for dental materials and paints)

IT 27936-91-0  
(alkyd resins contg. dendritic polyesters and)

IT 473-81-4 2831-90-5 4767-03-7 10097-02-6  
10097-03-7  
(chain-lengthening agent, in dendritic polyester  
manuf., for dental materials and paints)

IT 98-73-7, p-t-Butylbenzoic acid 53632-09-0  
(chain-stopping agent, in dendritic polyester manuf.,  
for dental materials and paints)

IT 65-85-0, Benzoic acid, miscellaneous 79-10-7, 2-Propenoic acid,  
miscellaneous 79-41-4, miscellaneous 124-07-2, Octanoic acid,  
miscellaneous 143-07-7, Dodecanoic acid, miscellaneous 334-48-5,  
Capric acid  
(chain-stopping agent, in dendritic polyester manuf.,  
for dental materials and paints)

IT 25085-98-7, Cyracure UVR 6100  
(cycloaliph. diepoxy resin, in dendritic polyester  
manuf. for dental materials and paints)

IT 75-75-2, Methanesulfonic acid 76-05-1, Trifluoroacetic acid, uses  
104-15-4, p-Toluenesulfonic acid, uses 1493-13-6 5593-70-4,  
Tetrabutyl titanate 7446-70-0, Aluminum chloride (AlCl<sub>3</sub>), uses  
7637-07-2, Boron trifluoride, uses 7646-78-8, Tin tetrachloride,  
uses 7664-38-2, Phosphoric acid, uses 7664-93-9, Sulfuric acid,  
uses 25155-19-5, Naphthalenesulfonic acid  
(esterification catalyst, polymn. in presence of, in  
dendritic polyester manuf. for dental materials and  
paints)

IT 30280-63-8P 32628-22-1DP, soya fatty acid-terminated  
150504-00-0DP, lauric acid- and soya fatty acid-terminated  
(manuf. of dendritic, for dental materials and paints)

IT 50-70-4DP, D-Glucitol, dendritic polyesters with  
carboxylic acids 56-81-5DP, 1,2,3-Propanetriol,  
dendritic polyesters with carboxylic acids 69-65-8DP  
, Mannitol, dendritic polyesters with carboxylic acids  
75-21-8DP, Oxirane, reaction products with alcs.,  
dendritic polyesters with carboxylic acids 75-56-9DP  
, reaction products with alcs., dendritic polyesters with  
carboxylic acids 77-85-0DP, Trimethylolethane,

dendritic polyesters with carboxylic acids 97-30-3DP,  
dendritic polyesters with carboxylic acids  
115-77-5DP, dendritic polyesters with carboxylic  
acids 126-30-7DP, dendritic polyesters with  
carboxylic acids 126-58-9DP, Dipentaerythritol,  
dendritic polyesters with carboxylic acids 4744-47-2DP,  
dendritic polyesters with carboxylic acids  
23235-61-2DP, Di-trimethylolpropane, dendritic  
polyesters with carboxylic acids 26249-20-7DP, Butyleneoxide,  
reaction products with alcs., dendritic polyesters with  
carboxylic acids 34541-79-2DP, Di-trimethylolethane,  
dendritic polyesters with carboxylic acids 52624-57-4DP,  
dendritic polyesters with carboxylic acids

(manuf. of, for dental materials and paints)

IT 94-36-0, Benzoyl peroxide, uses 121-69-7, uses 123-31-9,  
Hydroquinone, uses 136-52-7, Cobalt octoate 614-45-9, tert-Butyl  
perbenzoate 947-19-3, Irgacure 184

(polymn. catalysts contg., in dendritic polyester  
manuf. for dental materials and paints)

IT 7440-31-5, Tin, uses 7440-66-6, Zinc, uses  
(powd., esterification catalyst, polymn. in presence of, in  
dendritic polyester manuf. for dental materials and  
paints)

L73 ANSWER 27 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 115:281276 HCA Full-text

OREF 115:47801a,47804a

TI Preparing a dispersant/viscosity index improver modified  
star polymer for lubricant additive

IN Van Zon, Arie; Klaver, Gerarda Jacoba

PA Shell Internationale Research Maatschappij B. V., Neth.

SO Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	EP 449374	A2	19911002	EP 1991-200679	199103 25
				<--	
	EP 449374	A3	19930811		
	EP 449374	B1	19951220		
	R: BE, DE, ES, FR, GB, IT, NL				
	US 5147570	A	19920915	US 1991-672995	

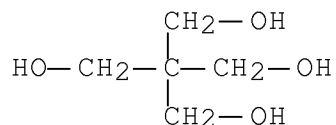
				199103 21
			<--	
ES 2080883	T3	19960216	ES 1991-200679	199103 25
			<--	
KR 172450	B1	19990320	KR 1991-4814	199103 27
			<--	
CA 2039431	A1	19911001	CA 1991-2039431	199103 28
			<--	
AU 9173965	A	19911003	AU 1991-73965	199103 28
			<--	
AU 637890	B2	19930610		
CN 1055758	A	19911030	CN 1991-101910	199103 28
			<--	
CN 1029786	C	19950920		
BR 9101263	A	19911105	BR 1991-1263	199103 28
			<--	
JP 05287290	A	19931102	JP 1991-64933	199103 28
			<--	
JP 2905611	B2	19990614		
RU 2041238	C1	19950809	RU 1991-4895092	199103 28

PRAI GB 1990-7267 A 19900330 <--

AB The title additives are prepd. by reaction of  $\alpha,\beta$ -unsatd. carboxylic acid (deriv.) with a hydrogenated star vinyl arom. copolymer to give an activated star polymer (ASP), reaction of  $\geq 1$  RO(AO) $n$ H (R = C4-20 alkyl; A = C2H4 or C3H6; n = 0-5) with ASP, optionally a long chain alkane-substituted carboxylic acid (deriv.), C1-8 amine and/or alkane polyol, or polyol polyamine, optionally esterifying residual acid groups. Shellvis 200 was heated at 133° for 18 h with maleic anhydride to give ASP (2% maleated), heated with a mol. equiv. of

Dobanol 91-5 (ethoxylate) at 150° for 1 h, and 170° for 3 h to give a viscosity index improver (13.6% star polymer, 0.014 mmol./g acid) for HVI 60 oil (flash point 200°).

IT 115-77-5D, Pentaerythritol, ester with ethoxylated  
maleated hydrogenated rubber  
(for viscosity index improve and lube oil additive)  
RN 115-77-5 HCA  
CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



IC ICM C08F008-00  
ICS C10M145-18; C10M149-14  
CC 37-3 (Plastics Manufacture and Processing)  
Section cross-reference(s): 51  
IT Lubricating oil additives  
(viscosity index improver and, alkoxyated modified  
hydrogenated star polymer, prepn. of)  
IT 115-77-5D, Pentaerythritol, ester with ethoxylated  
maleated hydrogenated rubber  
(for viscosity index improve and lube oil additive)  
L73 ANSWER 28 OF 33 HCA COPYRIGHT 2008 ACS on STN  
AN 115:184163 HCA Full-text  
OREF 115:31475a,31478a  
TI Manufacture of vinyl polymer emulsions using pre-emulsified monomers  
IN Barkai, Zsuzsanna; Maschek, Ottmar; Jaky, Geza; Varadi, Tibor;  
Szabo, Lajos; Santha, Laszlo; Szegedi, Lakos  
PA Budalakk Festek es Mugyantagyar, Hung.  
SO Hung. Teljes, 16 pp.  
CODEN: HUXXB  
DT Patent  
LA Hungarian  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	HU 54181	A2	19910128	HU 1988-6454	198812 16

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ethoxylated, esters with maleic anhydride-styrene copolymer, ammonium salts 9002-92-0D, Polyethylene glycol lauryl ether, reaction products with maleic anhydride-styrene copolymer stearate and polyethoxylated sorbitol tall-oil fatty ester, ammonium salts 9011-13-6D, Maleic anhydride-styrene copolymer, esters with polyethylene glycol derivs., ammonium salts 25322-68-3D, maleic anhydride-styrene copolymer derivs., ammonium salts 52503-38-5D, reaction products with polyethoxylated sorbitol tall-oil fatty esters and polyethylene glycol lauryl ether, ammonium salts 136218-51-4 136218-52-5 136772-70-8  
(emulsifiers, for polymn. of vinyl polymers)

L73 ANSWER 29 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 110:175182 HCA Full-text

OREF 110:29059a,29062a

TI Design of highly pigment-dispersible coatings based on acid/base concept

AU Kobayashi, T.; Tsutsui, K.; Hirasawa, Y.; Ikeda, S.

CS Tech. Cent., Nippon Paint Co., Ltd., Osaka, Japan

SO Advances in Organic Coatings Science and Technology Series (1983), 10(Int. Conf. Org. Coat. Sci. Technol., 12th, 1986), 114-20

CODEN: AOCSDV; ISSN: 0271-1885

DT Journal

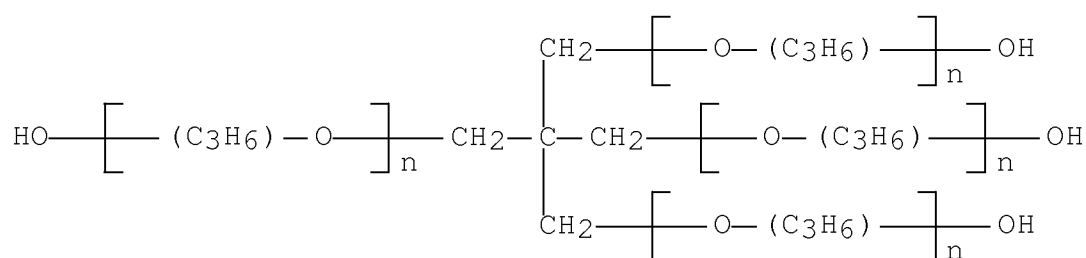
LA English

AB Highly dispersed states of pigments could be attained by adjusting acid-base amts. of resins with those of pigments, which were detd. by non-aq. titrn. Pigment-dispersing resins were designed to be compatible with binders of paints, on the basis of the soly. parameter concept. Pigment-dispersing resins with viscosities low enough to formulate non-solvent paints could be obtained by the acid-base modification of anionically polymd. star -shaped polyether-polyols. A non-solvent type of paste was developed.

IT 9051-49-4, Pentaerythritol-propylene oxide copolymer  
(coatings, design of, with highly dispersed states of pigments, acid-base concept in)

RN 9051-49-4 HCA

CN Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (CA INDEX NAME)



CC 42-10 (Coatings, Inks, and Related Products)  
 ST pigment dispersion coating acid base; polyether polyol  
 coating pigment dispersion  
 IT 9051-49-4, Pentaerythritol-propylene oxide copolymer  
 (coatings, design of, with highly dispersed states of pigments,  
 acid-base concept in)

L73 ANSWER 30 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 98:216841 HCA Full-text

OREF 98:32985a,32988a

TI Electric cables

PA Showa Electric Wire and Cable Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 58023107	A	19830210	JP 1981-120964	198108 01

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PRAI JP 1981-120964 19810801 <--

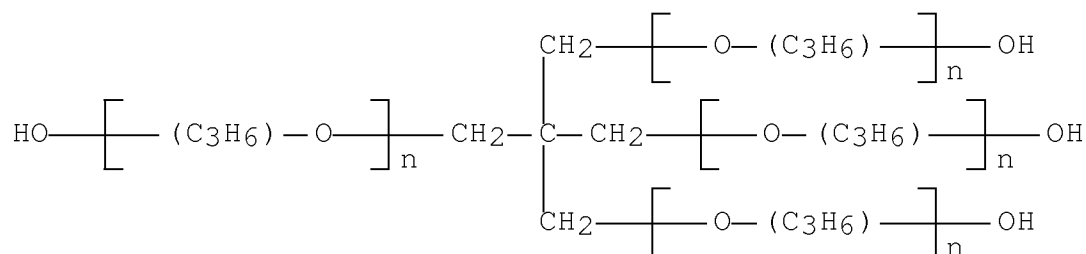
AB Elec. cables having improved water-treeing resistance contain a semiconductive layer from ethylene-vinyl acetate copolymer (I) [24937-78-8] and 1-25 phr polyethylene glycol pentaerythritol ether (4:1) (II) [42503-45-7] or polypropylene glycol pentaerythritol ether (4:1) [9051-49-4]. For example, a semiconductive layer was formed from I 100, carbon black 70, dicumyl peroxide 0.2, and II 20 parts.

IT 9051-49-4

(elec. cables contg. ethylene-vinyl acetate copolymer and, in semiconductive layers, with improved water treeing resistance)

RN 9051-49-4 HCA

CN Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -hydro- $\omega$ -hydroxy-,  
ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (CA INDEX  
NAME)



IC H01B009-02; H01B001-24

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 76

ST elec cable treeing resistance; ethylene copolymer semiconductive  
elec cable; alkoxyated pentaerythritol semiconductive  
elec cable

IT Electric breakdown

(dendritic, in elec. cables, prevention of, by  
semicond. polyoxyalkylene ether layers)

IT 9051-49-4 42503-45-7

(elec. cables contg. ethylene-vinyl acetate copolymer and, in  
semiconductive layers, with improved water treeing resistance)

L73 ANSWER 31 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 90:153201 HCA Full-text

OREF 90:24371a,24374a

TI Polyurethane foams

IN Watanabe, Nobuyuki; Okawara, Hiroshi; Nishimura, Akira; Takai,  
Makoto; Onoda, Koji

PA Miyoshi Oil and Fat Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 53146798	A	19781220	JP 1977-61739	

197705

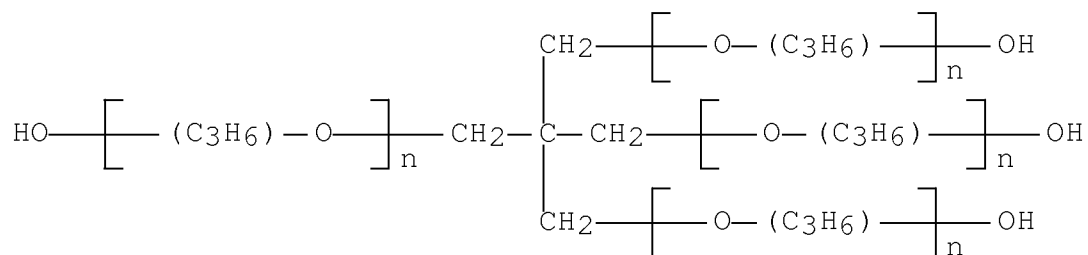
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JP 60031205 B 19850720  
 PRAI JP 1977-61739 A 19770528 <--  
 AB Heat-resistant polyurethane foams, with increased tensile strength, were prep'd. by esterifying a mixt. of linear fatty acid  $\text{RCH}_2\text{CO}_2\text{H}$  (I), where R is C8-20 alkyl group, and a branched fatty acid  $\text{R}_1\text{CHR}_2\text{CO}_2\text{H}$  (II), where  $\text{R}_1$  is C4-19 alkyl group and  $\text{R}_2$  is C1-10 alkyl group, with a polyhydric alc. and foaming compns. contg. the ester and an isocyanate. Thus, 100 parts of a mixt. of I (total C no. is 12-15) and II ( $\text{R}_1$  is C5-12 alkyl and  $\text{R}_2$  is C1-6 alkyl) at 35:65 wt. ratio was esterified with 2726 parts pentaerythritol-propylene oxide adduct to give an ester (III). A blend contg. III 100, triethanolamine 3.0,  $\text{H}_2\text{O}$  3, triethylenediamine 0.125,  $\text{Et}_3\text{N}$  0.7, a silicone foaming regulator 2.0, and TDI 37 parts was foamed to give a foam with tensile strength 1.54 kg/cm<sup>2</sup> and heat distortion temp. 131°, compared with 1.36 kg/cm<sup>2</sup> and 124°, resp., for a foam obtained from a similar compn. contg. glycerol-ethylene oxide adduct instead of III.

IT 9051-49-4D, esters with linear-branched fatty acids, polymers with TDI  
 (cellular, heat-resistant, with increased tensile strength)

RN 9051-49-4 HCA

CN Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (CA INDEX NAME)



IC C08G018-32A  
 CC 37-3 (Plastics Fabrication and Uses)  
 IT Fatty acids, esters  
 (linear-branched, esters with polyhydric alcs., polymers with TDI, cellular, heat-resistant)  
 IT 9051-49-4D, esters with linear-branched fatty acids, polymers with TDI 26471-62-5D, polymers with esters of linear-branched fatty acids with polyhydric

alcs. 61710-63-2D, esters with linear-branched fatty acids, polymers with TDI  
(cellular, heat-resistant, with increased tensile strength)

L73 ANSWER 32 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 88:74887 HCA Full-text

OREF 88:11831a,11834a

TI Highly branched polyether polyols of high molecular weight

IN Helfert, Herbert; Langdon, William Keith; Davis, Pauls

PA BASF Wyandotte Corp., USA

SO U.S., 5 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	
PI	US 4061684	A	19771206	US 1976-736939	19761029
				<--	
	CA 1100688	A1	19810505	CA 1977-289789	19771028
				<--	

PRAI US 1976-736939 A 19761029 <--

AB The title compds. are prepd. by coupling an alkoxyated polyglycerol with diethylene glycol bis(benzenesulfonate), and are useful as hydrophilic water-swellaable gels. Thus, a highly-branched polyglycerol polyol contg. <1% glycerol (I) units was prepd. by treating a polyglycerol (5.4 I units/mol.) with a mixt. of 85% ethylene oxide and 15% propylene oxide in 3 stages, using in each stage a ratio of 6 parts alkylene oxide/1 part polyglycerol. The polyol, which had viscosity 123.7 SUS (15 wt.% soln., 37.8°) was refluxed in N for 6 h, cooled to 100°, and treated with 6.5 g of the bis(benzenesulfonate) and 50 mL benzene. The soln. was stirred 90 s and evapd. to form a viscous resinous product, which exhibited (as a 5 wt.% soln.) Brookfield viscosity (20°, Spindle No. 2) 112 and 96 cP at 2.5 and 100 rpm, resp.

IT 9082-00-2DP, reaction products with diethylene glycol bis(benzenesulfonate)

(gels, highly branched, manuf. of)

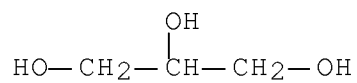
RN 9082-00-2 HCA

CN Oxirane, 2-methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1) (CA INDEX NAME)

CM 1

CRN 56-81-5

CMF C3 H8 O3



CM 2

CRN 9003-11-6

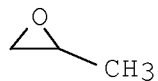
CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 3

CRN 75-56-9

CMF C3 H6 O



CM 4

CRN 75-21-8

CMF C2 H4 O



IC C07C043-00

INCL 260615000B

CC 36-3 (Plastics Manufacture and Processing)

ST polyether polyol glycol benzenesulfonate; coupler ethylene

glycol bisbenzenesulfonate

IT 9082-00-2DP, reaction products with diethylene glycol  
bis(benzenesulfonate) 65540-85-4DP, reaction products with  
ethylene oxide-glycerol-propylene oxide polymers  
(gels, highly branched, manuf. of)

L73 ANSWER 33 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 64:105421 HCA Full-text

OREF 64:19925h,19926a-c

TI Expanded polyurethans

PA Imperial Chemical Industries Ltd.

SO 14 pp.

DT Patent

LA Unavailable

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	BE 663892	19651116	BE	
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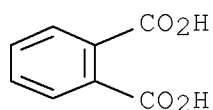
PRAI GB 19640513 <--

AB The title products with improved mech. properties at elevated temp., can be manufd. by treating a branched polyester (I) of low OH no. with a polyisocyanate in the presence of an inert liquid of low b.p. (20-80% based on I). The acid component of I should contain  $\geq 80$  mole % phthalic acid or its derivs. The branching of I is assured by using polyols, such as glycerol, trimethylolpropane, hexanetriol, pentaerythritol, or Me glucoside. To avoid cross-linking, phthalic anhydride (II) is treated with a polyol and an alkylene oxide in the presence of an amine catalyst. In order to obtain rigid foams, the mol. wt. of I should be 500-2000. The viscosity of the reaction mixt. can be lowered by addn. to I of a polyether having  $\geq 3$  OH groups/mol. Thus, I was prepd. by refluxing II 1776, pentaerythritol 408, N,N-dimethylbenzylamine 6, and dioxane 600 parts in a N atm. Propylene oxide (III) (768 parts) was added to this mixt. and, after 16 hrs., an addnl. portion of III (50 parts) was added. After distn. of volatiles, a hard glassy I was obtained (OH no. 209 mg. KOH/g.; acid no. 6.9 mg. KOH/g.). To this I, 50 wt. % (based on I) oxypropylenated trimethylolpropane (IV) (OH no. 530) and 60 wt. % (based on I) FCC13 are added. To 28 parts of this mixt., siloxane-oxyalkylene copolymer 0.2, diphenylmethane diisocyanate 17, and N,N-dimethylcyclohexylamine 0.07 part were added, and a rigid foam (sp. gr. 32 g./dm.<sup>3</sup>) softening under pressure at 210-30° (compared to 160° for a similar foam derived from IV) was obtained.

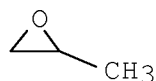
IT 88-99-3, Phthalic acid

(polyesters, branched, reaction products with propylene oxide, urethan polymer foams from polyethers and)

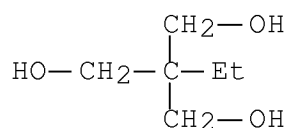
RN 88-99-3 HCA  
CN 1,2-Benzenedicarboxylic acid (CA INDEX NAME)



IT 75-56-9, Propylene oxide  
(reaction products with branched phthalate polyesters and with  
polyols, urethan polymer foams from)  
RN 75-56-9 HCA  
CN Oxirane, 2-methyl- (CA INDEX NAME)



IT 77-99-6, 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-  
(urethan polymer foams from)  
RN 77-99-6 HCA  
CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



CC 48 (Plastics Technology)  
IT Ethers  
(urethan polymer foams from branched  
polyester-propylene oxide reaction products and branched)  
IT 88-99-3, Phthalic acid  
(polyesters, branched, reaction products with propylene oxide,  
urethan polymer foams from polyethers and)  
IT 102-71-6, Ethanol, 2,2',2''-nitrilotri-  
(reaction products of, with propylene oxide, urethan  
polymer foams from branched phthalate  
polyesterpropylene oxide reaction products and)  
IT 75-56-9, Propylene oxide



(reaction products with branched phthalate polyesters and with polyols, urethan polymer foams from)  
IT 77-99-6, 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl-  
(urethan polymer foams from)

=> D L74 1-10 BIB ABS HITSTR HITIND

L74 ANSWER 1 OF 10 HCA COPYRIGHT 2008 ACS on STN

AN 139:397041 HCA Full-text

TI Coating compositions with storage stability at low temperature for formation of electrically insulated films

IN Kuroki, Masakatsu; Hanahata, Hiroyuki

PA Asahi Kasei Corporation, Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 2003336009	A	20031128	JP 2002-146100	20020521

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PRAI JP 2002-146100 20020521 <--

AB Title compns. contain (a) SiO<sub>2</sub> precursors selected from 1-6 functional alkoxysilanes as R<sub>1</sub>nSi(OR<sub>2</sub>)<sub>4-n</sub> (R<sub>1</sub>, R<sub>2</sub> = H or hydrocarbyl; n = 0-3) and/or R<sub>3</sub>m(OR<sub>4</sub>)<sub>3-m</sub>SiR<sub>7</sub>pSi(OR<sub>5</sub>)<sub>3-q</sub>R<sub>6</sub>q [R<sub>3</sub>-R<sub>6</sub> = H or hydrocarbyl; R<sub>7</sub> = O or (CH<sub>2</sub>)<sub>r</sub> with r = 1-6; m, q = 0-2; p = 0-1], their hydrolyzates, and polycondensates and (b) org. polymers contg. ≥10% branched polymers contg. ≥3 C/O bond connecting groups connecting ≥3 block copolymers based from ≥2 components. An aq. compn. contg. Si(OEt)<sub>4</sub>, MeSi(OEt)<sub>3</sub>, (OEt)<sub>3</sub>SiCH<sub>2</sub>CH<sub>2</sub>Si(OEt)<sub>3</sub>, acids, and ethylene oxide-propylene oxide block copolymer glycerol ether was reacted at 50° for 6 h, concd., and dild. to form a soln. showing storage stability at -20°, which was spin-coated on a Si wafer, heated, and calcined at 400° for 1 h to form a 0.95-μ porous SiO<sub>2</sub> film with dielec. const. of 2.23.

IT 107498-00-0, Ethylene oxide-propylene oxide block copolymer glycerol ether

(branched polyether block copolymer-contg.

siloxane coatings with low-temp. stability for manuf. of porous thin SiO<sub>2</sub> films)

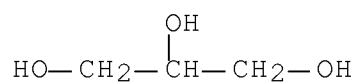
RN 107498-00-0 HCA

CN Oxirane, 2-methyl-, polymer with oxirane, ether with  
1,2,3-propanetriol (3:1), block (CA INDEX NAME)

CM 1

CRN 56-81-5

CMF C3 H8 O3



CM 2

CRN 106392-12-5

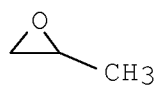
CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 3

CRN 75-56-9

CMF C3 H6 O



CM 4

CRN 75-21-8

CMF C2 H4 O



IC ICM C09D183-04

ICS C01B033-12; C09D005-25; C09D183-02; C09D183-14; C09D201-00;  
H01L021-316

CC 42-10 (Coatings, Inks, and Related Products)  
Section cross-reference(s): 38

IT Polysiloxanes, uses  
(SiO<sub>2</sub> precursor; branched polyether block  
copolymer-contg. siloxane coatings with low-temp.  
stability for manuf. of porous thin SiO<sub>2</sub> films)

IT Polyoxyalkylenes, uses  
(block, triblock; branched polyether block  
copolymer-contg. siloxane coatings with low-temp.  
stability for manuf. of porous thin SiO<sub>2</sub> films)

IT Coating materials  
(storage-stable; branched polyether block  
copolymer-contg. siloxane coatings with low-temp.  
stability for manuf. of porous thin SiO<sub>2</sub> films)

IT 512195-55-0P  
(SiO<sub>2</sub> precursor; branched polyether block  
copolymer-contg. siloxane coatings with low-temp.  
stability for manuf. of porous thin SiO<sub>2</sub> films)

IT 107498-00-0, Ethylene oxide-propylene oxide block  
copolymer glycerol ether  
(branched polyether block copolymer-contg.  
siloxane coatings with low-temp. stability for manuf. of porous  
thin SiO<sub>2</sub> films)

IT 7631-86-9P, Silica, uses  
(film; branched polyether block copolymer  
-contg. siloxane coatings with low-temp. stability for manuf. of  
porous thin SiO<sub>2</sub> films)

L74 ANSWER 2 OF 10 HCA COPYRIGHT 2008 ACS on STN

AN 139:150310 HCA Full-text

TI Study of physicochemical properties of branched ethylene  
oxide-propylene oxide random copolymers

AU Koshelev, V. N.; Vakhrushev, L. P.; Belenko, E. V.; Polishchuchenko,  
V. P.; Ostryagin, A. I.

CS OAO "Purneftegazgeologiya", OAO NPO "Burenie", Russia

SO Izvestiya Vysshikh Uchebnykh Zavedenii, Severo-Kavkazskii Region,  
Estestvennye Nauki (2001), (1), 56-60  
CODEN: IVUNE6; ISSN: 1026-2237

PB Rostovskii Gosuniversitet

DT Journal

LA Russian

AB Effect of mol. wt. and degree of branching on foam forming, surface  
active, and spectral characteristics of ethylene oxide-propylene  
oxide random copolymers was investigated. Ethylene oxide-propylene  
oxide copolymers prepd. by anionic polymn. using

tetraethanolethylenediamine, glycerol, and ethylene glycol formed tetra- and tri-armed, and linear copolymers, resp.

IT 9082-00-2P, Ethylene oxide-propylene oxide copolymer ether with glycerol  
 (properties of branched ethylene oxide-propylene oxide random copolymers)

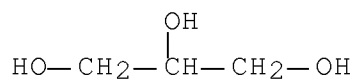
RN 9082-00-2 HCA

CN Oxirane, 2-methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1) (CA INDEX NAME)

CM 1

CRN 56-81-5

CMF C3 H8 O3



CM 2

CRN 9003-11-6

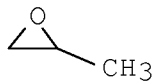
CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 3

CRN 75-56-9

CMF C3 H6 O



CM 4

CRN 75-21-8

CMF C2 H4 O



CC 37-5 (Plastics Manufacture and Processing)  
Section cross-reference(s): 46

IT Polymer chains  
(branching; properties of branched ethylene  
oxide-propylene oxide random copolymers)

IT 9003-11-6, Ethylene oxide-propylene oxide copolymer  
(properties of branched ethylene oxide-propylene oxide  
random copolymers)

IT 9082-00-2P, Ethylene oxide-propylene oxide copolymer ether  
with glycerol 56449-04-8P  
(properties of branched ethylene oxide-propylene oxide random  
copolymers)

L74 ANSWER 3 OF 10 HCA COPYRIGHT 2008 ACS on STN

AN 138:354410 HCA Full-text

TI Structured hydrogels based on poly(ethylene oxide) multi-arm stars  
with hyperbranched polyglycerol cores

AU Knischka, Ralf; Lutz, Pierre J.; Sunder, Alexander; Frey, Holger

CS Inst. fuer Makromol. Chem. und Freiburger Materialforschungszentrum  
FMF, Albert-Ludwigs-Univ., Freiburg, D-79104, Germany

SO Polymeric Materials Science and Engineering (2001), 84,  
945-946  
CODEN: PMSEDG; ISSN: 0743-0515

PB American Chemical Society

DT Journal

LA English

AB Poly(ethylene oxide) (PEO) hydrogels were prepd. by free radical  
polymn. of linear  $\alpha,\omega$ -dimethacrylate PEO macromonomers with PEO  
multi-arm star polymers partially modified with methacrylate groups.  
The PEO stars were prepd. by anionic polymn. of oxirane starting from  
a hyperbranched poly(glycerol-b-propylene oxide) core. The resulting  
networks were studied as gels swollen to equil. in water. In each  
case, the amt. of extractable material, the degree of equil.  
swelling, and the uniaxial compression modulus were detd. When the  
amt. of the PEO star is kept low (around 10% with respect to the  
linear macromonomer) the properties of the resulting networks are  
close to those of hydrogels obtained by homopolymn. of bifunctional  
PEO macromonomers. However, the residual hydroxyl functions in the  
network, originating from the PEO stars, allow yet further  
modifications of the properties of the hydrogels.

IT 141954-63-4DP, Glycerol-propylene oxide block copolymer,

methacrylated

(core; prepn. and swelling and elasticity of hydrogels of poly(ethylene oxide) multi-arm stars with hyperbranched polyglycerol cores)

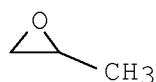
RN 141954-63-4 HCA

CN 1,2,3-Propanetriol, polymer with 2-methyloxirane, block (CA INDEX NAME)

CM 1

CRN 75-56-9

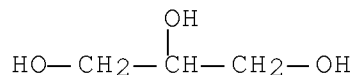
CMF C3 H6 O



CM 2

CRN 56-81-5

CMF C3 H8 O3



CC 35-8 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 36

ST polyethylene oxide dimethacrylate polymn star

polyglycerol core structure hydrogel; swelling compression modulus  
PEO hyperbranched polyglycerol hydrogel

IT Polymers, preparation

(star-branched; prepn. and swelling and elasticity of hydrogels of poly(ethylene oxide) multi-arm stars with hyperbranched polyglycerol cores)

IT 141954-63-4DP, Glycerol-propylene oxide block copolymer, methacrylated

(core; prepn. and swelling and elasticity of hydrogels of poly(ethylene oxide) multi-arm stars with hyperbranched polyglycerol cores)

RE.CNT 17      THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L74 ANSWER 4 OF 10    HCA    COPYRIGHT 2008 ACS on STN

AN 132:152288    HCA    Full-text

TI Functional Poly(ethylene oxide) Multiarm Star  
Polymers: Core-First Synthesis Using Hyperbranched  
Polyglycerol Initiators

AU Knischka, Ralf; Lutz, Pierre J.; Sunder, Alexander; Muelhaupt, Rolf;  
Frey, Holger

CS Institut Charles Sadron (CNRS), Strasbourg, F-67083, Fr.

SO Macromolecules (2000), 33(2), 315-320

CODEN: MAMOBX; ISSN: 0024-9297

PB American Chemical Society

DT Journal

LA English

AB Hyperbranched polyglycerol as well as polyglycerol modified with short apolar oligo(propylene oxide) segments ( $DP_n = 23-52$ ;  $M_w/M_n = 1.2-1.4$ ) was deprotonated with diphenylmethylpotassium and used as polyfunctional initiators for the anionic polymn. of ethylene oxide to prep. poly(ethylene oxide) (PEO) multiarm star polymers. In the case of unmodified polyglycerol, after metalation, aggregation occurred, preventing efficient initiation and propagation. Using the apolarly modified polyglycerols with terminal oligo(propylene oxide) segments, hydroxy-functional PEO multiarm star polymers with  $M_n$  values in the range 34,000-95,000 g/mol, arm nos. in the range 26-55, and narrow polydispersity ( $M_w/M_n < 1.5$ ) were obtained in a core-first strategy.  $^1H$  and  $^{13}C$  NMR measurements evidenced complete conversion of all end groups of the propylene oxide-capped end groups of the initiator. Reinitiation of the multiarm PEO stars by deprotonation was possible and afforded star polymers with considerably larger mol. wts. ( $M_n = 180\ 000$  g/mol) and identical functionality. The thermal properties of the stars (DSC) were found to depend strongly on the arm length. The novel multiarm star architectures prepd. consist of polyether structures only and are thus of interest for biomedical applications, e.g., in hydrogels.

IT 141954-63-4, Glycerol-propylene oxide block copolymer  
(hyperbranched, initiator; functional poly(ethylene oxide)  
multiarm star polymers prepd. by core-first  
synthesis using hyperbranched polyglycerol-based initiators)

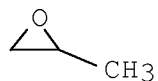
RN 141954-63-4    HCA

CN 1,2,3-Propanetriol, polymer with 2-methyloxirane, block (CA INDEX  
NAME)

CM 1

CRN 75-56-9

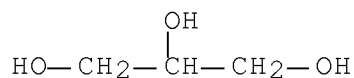
CMF C3 H6 O



CM 2

CRN 56-81-5

CMF C3 H8 O3



IT 118086-72-9P, Ethylene oxide-glycerol block  
copolymer 257955-05-8P, Ethylene  
oxide-glycerol-propylene oxide block copolymer  
(multiarm star-branched; functional  
poly(ethylene oxide) multiarm star polymers  
prepd. by core-first synthesis using hyperbranched  
polyglycerol-based initiators)

RN 118086-72-9 HCA

CN 1,2,3-Propanetriol, polymer with oxirane, block (9CI) (CA INDEX  
NAME)

CM 1

CRN 75-21-8

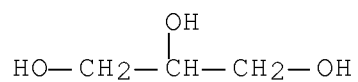
CMF C2 H4 O



CM 2



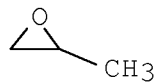
CRN 56-81-5  
CMF C3 H8 O3



RN 257955-05-8 HCA  
CN 1,2,3-Propanetriol, polymer with methyloxirane and oxirane, block  
(9CI) (CA INDEX NAME)

CM 1

CRN 75-56-9  
CMF C3 H6 O



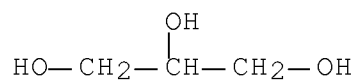
CM 2

CRN 75-21-8  
CMF C2 H4 O



CM 3

CRN 56-81-5  
CMF C3 H8 O3



CC 35-7 (Chemistry of Synthetic High Polymers)  
 ST ethylene oxide multiarm star block copolymer  
 prepn; polyglycerol initiator ethylene oxide multiarm star  
 block copolymer  
 IT Polymerization  
 (anionic, ring-opening; functional poly(ethylene oxide) multiarm  
 star polymers prepd. by core-first synthesis  
 using hyperbranched polyglycerol-based initiators)  
 IT Polyoxyalkylenes, preparation  
 (multiarm star-branched; functional poly(ethylene oxide) multiarm  
 star polymers prepd. by core-first synthesis  
 using hyperbranched polyglycerol-based initiators)  
 IT Polymers, preparation  
 (star-branched; functional poly(ethylene  
 oxide) multiarm star polymers prepd. by  
 core-first synthesis using hyperbranched polyglycerol-based  
 initiators)  
 IT 25618-55-7, Glycerol homopolymer 141954-63-4,  
 Glycerol-propylene oxide block copolymer  
 (hyperbranched, initiator; functional poly(ethylene oxide)  
 multiarm star polymers prepd. by core-first  
 synthesis using hyperbranched polyglycerol-based initiators)  
 IT 118086-72-9P, Ethylene oxide-glycerol block  
 copolymer 257955-05-8P, Ethylene  
 oxide-glycerol-propylene oxide block copolymer  
 (multiarm star-branched; functional  
 poly(ethylene oxide) multiarm star polymers  
 prepd. by core-first synthesis using hyperbranched  
 polyglycerol-based initiators)  
 RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L74 ANSWER 5 OF 10 HCA COPYRIGHT 2008 ACS on STN  
 AN 131:5650 HCA Full-text  
 TI Synthesis of well-defined C60 end-capped poly(ethylene oxide) stars  
 and linear analogs  
 AU Logan, Jennifer L.; Duran, Randolph S.; Taton, Daniel; Angot,  
 Stephanie; Gnanou, Yves  
 CS Department of Chemistry, Rollins College, Winter Park, FL, USA  
 SO Polymer Preprints (American Chemical Society, Division of Polymer  
 Chemistry) (1999), 40(1), 125-126  
 CODEN: ACPPAY; ISSN: 0032-3934  
 PB American Chemical Society, Division of Polymer Chemistry  
 DT Journal

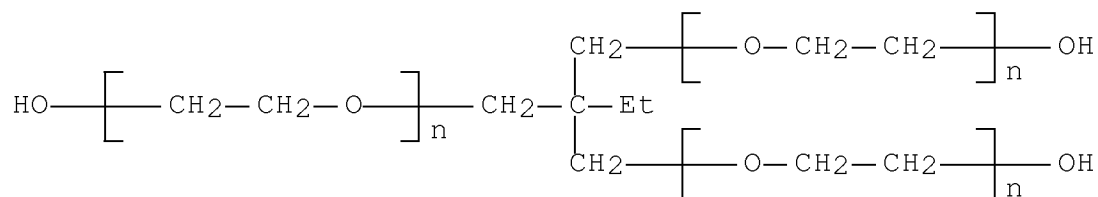
LA English

AB The synthesis of star polymers is of interest as such structures form the most elementary way to arrange the subchains of a branched polymer, with each star contg. only one branching point. These architectures represent useful models for the exptl. evaluation of theories concerning the soln. properties and rheol. behavior of branched polymers. Poly(ethylene oxide), in particular, is of interest as the hydroxyl end-groups can be replaced with C60, thereby introducing amphiphilic behavior. We have demonstrated the synthesis of new fullerene-contg. star polymers. These materials may have interest as novel amphiphiles and in their ability to self-organize in the bulk.

IT 50586-59-9P  
(synthesis of well-defined poly(ethylene oxide) stars and C60-end-capped linear analogs)

RN 50586-59-9 HCA

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



CC 35-7 (Chemistry of Synthetic High Polymers)

ST polyethylene glycol star polymer fullerene terminated

IT Polymers, preparation  
(star-branched; synthesis of well-defined poly(ethylene oxide) stars and C60-end-capped linear analogs)

IT 42503-45-7P, Polyethylene glycol ether with pentaerythritol (4:1)  
50586-59-9P 82973-76-0P 124303-73-7P 225531-48-6P  
225531-49-7P 225531-50-0P 225531-51-1P 225531-52-2P  
(synthesis of well-defined poly(ethylene oxide) stars and C60-end-capped linear analogs)

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L74 ANSWER 6 OF 10 HCA COPYRIGHT 2008 ACS on STN

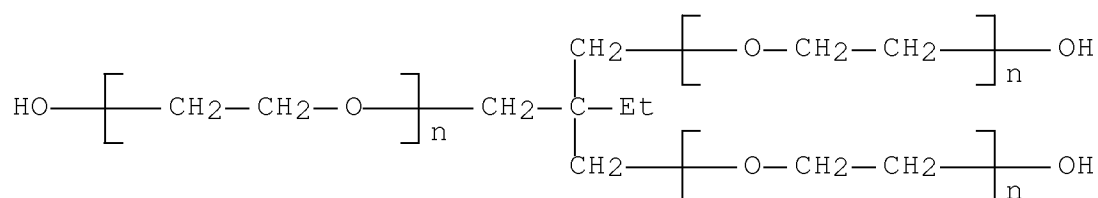
AN 127:221050 HCA Full-text

OREF 127:43089a,43092a

TI Towards the easy synthesis of poly(ethylene oxide)

dendrimers

- AU Bera, Tushar Kanti; Taton, Daniel; Gnanou, Yves  
CS Laboratoire de Chimie des Polymeres Organiques, UMR CNRS-ENSCP, Université Bordeaux 1, Talence, 33402, Fr.  
SO Polymeric Materials Science and Engineering (1997), 77, 126-127  
CODEN: PMSEDG; ISSN: 0743-0515  
PB American Chemical Society  
DT Journal  
LA English  
AB Dendritic poly(ethylene oxides) up to fourth generation was obtained. A tin compd. serving as a new branching agent was designed for the arborization step. The polymn. of ethylene oxide was carried out in DMSO, this solvent turned out to be far better than THF as no aggregation of alcoholate was obsd. The characterizations by size exclusion chromatog. revealed that the behavior of these architectures was strongly affected by the dendritic pattern and by the presence of terminal hydroxyl functions. The samples obtained indeed exhibited different soln. properties depending on the ratio of the total no. of hydroxyl groups to the molar mass of the dendrimer.  
IT 50586-59-9P  
(intermediate; synthesis of poly(ethylene oxide) dendrimers)  
RN 50586-59-9 HCA  
CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



- CC 35-4 (Chemistry of Synthetic High Polymers)  
ST polyethylene oxide dendrimer prepn tin deriv  
IT Dendritic polymers  
(starburst; synthesis of poly(ethylene oxide) dendrimers)  
IT 50586-59-9P  
(intermediate; synthesis of poly(ethylene oxide) dendrimers)  
IT 67-68-5, DMSO, uses  
(solvent; for synthesis of poly(ethylene oxide))

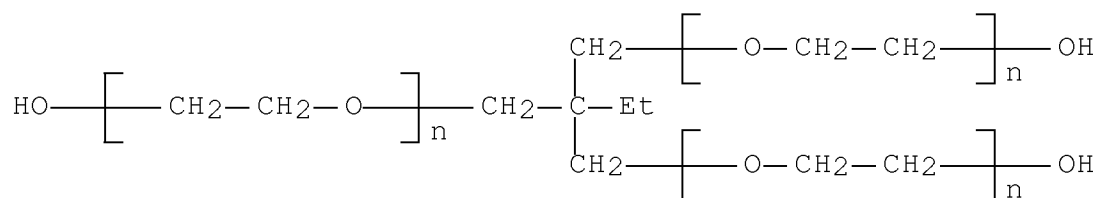
dendrimers)  
 IT 195065-49-7P 195065-50-0P  
 (synthesis of poly(ethylene oxide) dendrimers)

L74 ANSWER 7 OF 10 HCA COPYRIGHT 2008 ACS on STN  
 AN 110:58212 HCA Full-text  
 OREF 110:9655a,9658a  
 TI Synthesis of star-shaped poly(ethylene oxide)  
 AU Gnanou, Yves; Lutz, Pierre; Rempp, Paul  
 CS Inst. Charles Sadron, Strasbourg, 67083, Fr.  
 SO Makromolekulare Chemie (1988), 189(12), 2885-92  
 CODEN: MACEAK; ISSN: 0025-116X

DT Journal  
 LA English

AB Three different methods to synthesize star-shaped poly(ethylene oxide) are discussed. In all three cases, the branches are grown from a plurifunctional initiator. It is established that even though the early stages of the polymn. occur in heterogeneous phase, the consequences on the polymers formed are of minor importance. The most significant method is a core-first process, involving multifunctional polydivinylbenzene cores as the initiating species, made anionically in dil. soln. Although strong assocn. phenomena are occurring during the growth of the branches, star-shaped poly(ethylene oxides) with a high no. of functionalized branches are obtained. The polymers arising from all three methods were characterized accurately.

IT 50586-59-9P  
 (prepn. and characterization of)  
 RN 50586-59-9 HCA  
 CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



CC 35-7 (Chemistry of Synthetic High Polymers)  
 ST polyethylene glycol star branched; divinylbenzene oxirane star graft polymer  
 IT Polymerization  
 (star, of oxirane, methods for)  
 IT 10060-17-0, Diphenylmethylpotassium

(catalysts, for polymn. of oxirane in presence of trimethylolpropane to three-arm star polymers )

IT 4216-48-2, Potassium naphthalene  
(catalysts, in polymn. of oxirane on divinylbenzene polymers or (hydroxyethyl)styrene polymers, in star-shaped polymer prepn.)  
IT 50586-59-9P  
(prepn. and characterization of)

L74 ANSWER 8 OF 10 HCA COPYRIGHT 2008 ACS on STN

AN 110:9838 HCA Full-text

OREF 110:1765a,1768a

TI Marking inks for smooth writing boards

IN Nagasawa, Toshiyuki

PA Orient Chemical Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 63043981	A	19880225	JP 1986-187364	19860808

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JP 05069869 B 19931001

PRAI JP 1986-187364 19860808 <--

AB Easily-erasable title inks, useful for writing on boards made of ceramics, plastics, metals, etc., contain alcs. and/or glycols, colorants, resins, and branched alkylene glycol condensates and/or branched esters of branched higher fatty acids. Thus, 20 parts a milled base comprising Solmix AP-21 (I, modified EtOH), Denka Butyral 3000-2, and Fast Red RC Conc. was blended with 72 parts I, 7 parts Bu oleate (II), and 1 part glycerin-propylene oxide adduct (III) to give an ink. A marking pen contg. the ink gave markings on an enamel-surfaced board with good drying propperties and erasability even at 60-80% humidity, vs. poor and poor, resp., for the ink contg. dioctyl azelate and Hitenol NE05 instead of II and III.

IT 9082-00-2

(marking inks contg., for smooth writing boards, erasable)

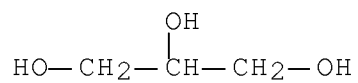
RN 9082-00-2 HCA

CN Oxirane, 2-methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1) (CA INDEX NAME)

CM 1

CRN 56-81-5

CMF C3 H8 O3



CM 2

CRN 9003-11-6

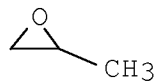
CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 3

CRN 75-56-9

CMF C3 H6 O



CM 4

CRN 75-21-8

CMF C2 H4 O



IC ICM C09D011-16

ICS C09D011-16

CC 42-12 (Coatings, Inks, and Related Products)

IT 57-50-1D, esters 93-34-5 142-77-8, Butyl oleate

9082-00-2 25791-96-2 41669-30-1, Isostearyl isostearate  
68171-33-5, Isopropyl isostearate 69650-15-3 98825-32-2,  
Phthalocyanine Green NY 117925-73-2, Paliogen Blue FA 7293  
(marking inks contg., for smooth writing boards, erasable)

L74 ANSWER 9 OF 10 HCA COPYRIGHT 2008 ACS on STN

AN 92:130469 HCA Full-text

OREF 92:21273a,21276a

TI Fiber lubricant properties and dynamic mechanical properties of  
polyoxyalkylene fluids

AU Koenig, H. Steve; Bryant, George M.

CS Res. Dev. Dep., Union Carbide Corp., South Charleston, WV, 25303,  
USA

SO Textile Research Journal (1980), 50(1), 1-5

CODEN: TRJOA9; ISSN: 0040-5175

DT Journal

LA English

AB Fiber friction properties of polyoxyalkylene lubricants are  
influenced by the viscoelastic properties of the fluid. Irresp. of  
the ethylene oxide/propylene oxide compn., the structure (linear or  
branched) of the polymer detcs. the dependence of glass temp. (Tg) and  
the sliding speed for max. frictional force (Umax) upon the no.-av.  
mol. wt. (Mn). The branched polyoxyalkylene triols unexpectedly  
displayed decreasing Tg and const. Umax as a function of Mn, contrary  
to the increasing Tg and decreasing Umax shown by the linear  
polyoxyethylene monoethers and diols with increasing Mn. The  
difference in the frictional dynamic properties of the linear and  
branched polymers appears to be a function of the bulk fluid H-  
bonding mode. The intramol. H-bonded branched polymers exhibit  
decreasing Tg and the intermol. H-bonded linear polymers displayed  
increasing Tg as a function of Mn.

IT 9082-00-2

(lubricating properties of, for fibers, effect of chain  
branching, hydrogen bonding, and glass temp. on)

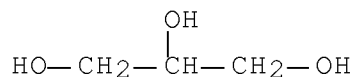
RN 9082-00-2 HCA

CN Oxirane, 2-methyl-, polymer with oxirane, ether with  
1,2,3-propanetriol (3:1) (CA INDEX NAME)

CM 1

CRN 56-81-5

CMF C3 H8 O3





CM 2

CRN 9003-11-6

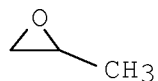
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 3

CRN 75-56-9

CMF C3 H6 O



CM 4

CRN 75-21-8

CMF C2 H4 O



CC 39-8 (Textiles)

IT 9003-11-6 9003-13-8 9082-00-2 25322-69-4 25791-96-2  
(lubricating properties of, for fibers, effect of chain  
branching, hydrogen bonding, and glass temp. on)

L74 ANSWER 10 OF 10 HCA COPYRIGHT 2008 ACS on STN

AN 89:25297 HCA Full-text

OREF 89:3937a,3940a

TI Polyethers for polyurethane plastics

IN Kubica, Zofia; Rudnicki, Krzysztof; Grzywa, Edward; Wojciechowski,  
Jerzy; Lisiak-Spadlo, Marianna; Weber, Krystian; Hetper, Irena

PA Instytut Ciezkiej Syntezy Organicznej "Blachownia", Pol.

SO Pol., 4 pp.

CODEN: POXXA7

DT Patent

LA Polish

FAN.CNT 1

	PATENT NO. ----- -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
PI	PL 90114	B1	19770131	PL 1974-168072	197401 12
				<--	
	HU 170994	B	19771028	HU 1975-II206	197501 08
				<--	
	DD 116466	A5	19751120	DD 1975-183590	197501 10
				<--	
	SU 578894	A3	19771030	SU 1975-2096110	197501 10
				<--	
	CS 183781	B2	19780731	CS 1975-201	197501 10

<--

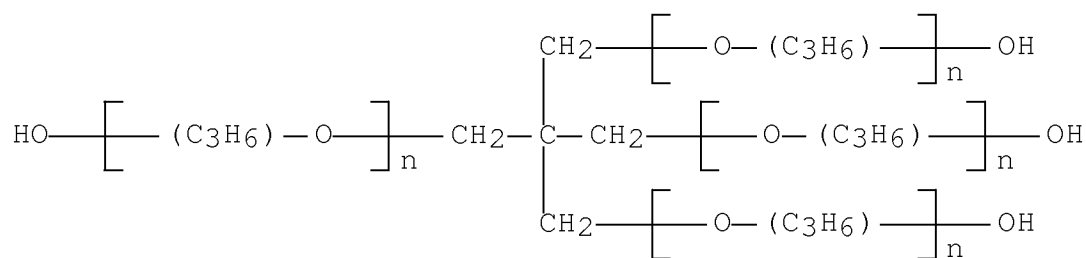
PRAI PL 1974-168072 A 19740112 <--

AB The title polyethers (I) contg. bound P were prepd. by polyaddn. of alkylene oxides and/or epichlorohydrin to H3PO4 (contg. 74-76% P2O5) in presence of polyethers (prepd. by polyaddn. of alkylene oxides and/or epichlorohydrin to compds. contg. 2-6 OH groups, oxyalkylenated PhOH-HCHO resins, or branched -chain polyethers contg. arom. rings). Thus, polyether [prepd. by reaction of 136 parts C(CH2OH)4 with 348 parts propylene oxide (II)] 100, H3PO4 20, epichlorohydrin 37, and II 50 parts were mixed at 60-90° under 3 atm pressure, the whole was stirred 2 h at 90°, and excess II was removed in vacuo to give I contg. 3% P and 7% Cl, which was used to prep. rigid polyurethane foam.

IT 9051-49-4D, reaction products with epichlorohydrin and phosphoric acid  
(for manuf. of polyurethane foams)

RN 9051-49-4 HCA

CN Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (CA INDEX NAME)



IC C08G065-00  
 CC 36-2 (Plastics Manufacture and Processing)  
 IT 7664-38-2D, reaction products with polyether polyols and  
 epichlorohydrin 9051-49-4D, reaction products with  
 epichlorohydrin and phosphoric acid  
 (for manuf. of polyurethane foams)

=> D L85 1-3 BIB ABS HITSTR HITIND

L85 ANSWER 1 OF 3 HCA COPYRIGHT 2008 ACS on STN  
 AN 141:128474 HCA Full-text  
 TI Two-phase roll-on cosmetic product containing a polymer and a  
 polysiloxane  
 IN Fei, Lin; Chopra, Suman; Patel, Neeta  
 PA Colgate-Palmolive Company, USA  
 SO U.S. Pat. Appl. Publ., 11 pp.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	
PI	US 20040141934	A1	20040722	US 2003-346834	200301 17
				<--	
	AU 2004206882	A1	20040805	AU 2004-206882	200401 16
				<--	
	CA 2513152	A1	20040805	CA 2004-2513152	200401

16

&lt;--

WO 2004064792                    A1            20040805            WO 2004-US1218

200401  
16

&lt;--

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,  
 CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
 GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,  
 KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
 MX, MZ

EP 1589935                    A1            20051102            EP 2004-703009

200401  
16

&lt;--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,  
 PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU,  
 SK

BR 2004006790                    A            20060117            BR 2004-6790

200401  
16

&lt;--

MX 2005PA07590                    A            20050930            MX 2005-PA7590

200507  
15

&lt;--

PRAI US 2003-346834                    A            20030117            <--  
 WO 2004-US1218                    W            20040116

AB    A two-phase, elastomer-free, low viscosity, high water roll-on antiperspirant and/or deodorant compn. comprises: (A) a non-polar phase having a viscosity up to 200 cP and comprising: (a) 0.1 to 40 wt.% of a volatile and/or a nonvolatile silicone selected from the group consisting of linear and cyclic organo-substituted polysiloxanes, wherein the viscosity is less than 5 cSt for volatile silicones and in the range of 5 to 20 cSt for non-volatile silicones; (b) 0 to 25 wt.% of a straight or branched chain hydrocarbon polymer which has an av. mol. wt. in the range of 450 to 6000 daltons; (c) 0 to 15 wt.% of one or more of a selected low viscosity, lipophilic emollient; and (B) a polar phase having a viscosity in the range of 10 to 2000 cP and comprising: (a) at least 5 wt.% of an antiperspirant active; (b) an aq. component comprising at least 40% water and a sufficient amt. of a C2-3 alc., a glycol or a polyhydric alc. so that the antiperspirant active is dissolved in the aq. component; and (c) a selected thickening agent. The ratio of oil phase to water phase of the compn. is in the range of 15:85 to 40:60, whereby the compn. is able to form a temporarily stabilized emulsion after shaking for a period not exceeding 24 h. For example, a compn.

comprised a nonpolar phase A contg. cyclomethicone 16.10%, Emulsogen SRO 0.10%, PPG-3 myristyl ether 3.00%, and fragrance 0.80, and a polar phase B contg. antiperspirant active 67.00%, propylene glycol 4.00%, Polymer JR 0.20%, and alc. (100%) 8.80%.

IT 75-21-8D, Ethylene oxide, polymers  
(two-phase roll-on antiperspirant and/or deodorant compn.  
comprising polymer and polysiloxane)  
RN 75-21-8 HCA  
CN Oxirane (CA INDEX NAME)



IC ICM A61K007-32  
INCL 424065000  
CC 62-4 (Essential Oils and Cosmetics)  
IT Alcohols, biological studies  
(fatty, propoxylated; two-phase roll-on antiperspirant  
and/or deodorant compn. comprising polymer and polysiloxane)  
IT Alcohols, biological studies  
(polyhydric; two-phase roll-on antiperspirant and/or  
deodorant compn. comprising polymer and polysiloxane)  
IT 57-55-6, Propylene glycol, biological studies 64-17-5, Ethanol,  
biological studies 65-85-0D, Benzoic acid, esters 67-63-0,  
Isopropyl alcohol, biological studies 75-21-8D, Ethylene  
oxide, polymers 1320-67-8, Propylene glycol methyl ether  
2598-99-4, Hexadecanoic acid octadecyl ester 9003-27-4D,  
Polyisobutene, hydrogenated 9003-29-6, Polybutene 9004-62-0,  
Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose  
9004-98-2, Oleth 10 9005-25-8, Starch, biological studies  
9006-65-9, Dimethicone 9016-00-6, Dimethyl polysiloxane  
13945-76-1, Dodecanoic acid dodecyl ester 24271-12-3, Docosanoic  
acid octadecyl ester 24800-44-0, Tripropylene glycol 25265-71-8,  
Dipropylene glycol 63793-60-2, PPG-3 myristyl ether 134910-86-4,  
Aluminum zirconium tetrachlorohydrate gly 314241-95-7, DC 5225C  
(two-phase roll-on antiperspirant and/or deodorant compn.  
comprising polymer and polysiloxane)

L85 ANSWER 2 OF 3 HCA COPYRIGHT 2008 ACS on STN

AN 111:148918 HCA Full-text

OREF 111:24745a,24748a

TI Active agents such as pharmaceuticals and pesticides entrapped in  
polymethacrylate lattices

IN Abrutyn, Eric S.; Chromecek, Richard C.; Scarfo, Louis J.

PA Dow Corning Corp., USA  
 SO Eur. Pat. Appl., 36 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	
PI	EP 252463	A2	19880113	EP 1987-109662	198707 04
				<--	
	EP 252463	A3	19890712		
	R: BE, CH, DE, FR, GB, IT, LI, NL				
	US 4855127	A	19890808	US 1987-53609	198705 20
				<--	
	AU 8774919	A	19880114	AU 1987-74919	198706 29
				<--	
	AU 612114	B2	19910704		
	BR 8703406	A	19880322	BR 1987-3406	198707 06
				<--	
	CA 1316902	C	19930427	CA 1987-541340	198707 06
				<--	
	JP 63218765	A	19880912	JP 1987-167951	198707 07
				<--	
	ES 2006518	A6	19890501	ES 1987-1982	198707 07
				<--	
PRAI	US 1986-882609	A	19860707	<--	
	US 1987-53609	A	19870520	<--	
	US 1981-246663	A2	19810323	<--	
	US 1984-683603	A2	19841212	<--	
AB	A solid, lattice-entrapped noncosmetic functional material compn. comprises 5-95% by wt. crosslinked hydrophobic comb-like polymer and 95-5% by wt. water-insol. liq. or solid functional material which is				

uniformly dispersed in the polymer matrix. The functional material include pesticides, pheromones, pharmaceuticals, microbicides, sunscreens, light stabilizers, food flavorants, pigments, or synthetic insect attractants. A mixt. contg. 60% lauryl methacrylate-40% ethylene glycol dimethacrylate and Grandlure in a 40:60 ratio was heated in a 4.5 mm diam. test tube and cut into plugs 15 mm long. These plugs were suspended in polycarbonate tubing and air was blown around them at 1 L/min at 20° and 10-15% relative humidity; the release of pheromone, as followed by the wt. loss of the sample, from the sample was  $1.5 \pm 10^{-4}$  g/h. for 50 days.

IC ICM C08F220-10  
ICS C08F002-44; A01N025-10; A61K009-22; A61K047-00; A23L001-22;  
A23L001-236; A23L001-275  
CC 5-4 (Agrochemical Bioregulators)  
Section cross-reference(s): 17, 62, 63  
IT Bactericides, Disinfectants, and Antiseptics  
Herbicides  
Pesticides  
Juvenile hormones  
Paraffin oils  
Petrolatum  
Petroleum spirits  
Pheromones  
Pyrethrins and Pyrethroids  
Soybean oil  
(hydrophobic polymer lattice matrix contg., sustained-release)  
IT Alcohols, esters  
(polyhydric, esters, with  $\alpha, \beta$ -unsatd.  
carboxylic acids, polymers with monounsatd. monomers, lattice  
matrix, for functional materials)  
IT Lanolin  
(propoxylated, hydrophobic polymer lattice matrix  
contg., sustained-release, Pentalyn H)  
IT Carboxylic acids, esters  
( $\alpha, \beta$ -unsatd., esters, with polyhydric alcs.,  
polymers with monounsatd. monomers, lattice matrix, for  
functional materials)

L85 ANSWER 3 OF 3 HCA COPYRIGHT 2008 ACS on STN

AN 55:121821 HCA Full-text

OREF 55:22910e-h

TI Solid foams containing urethan groups

IN Nischk, Gunther; Braun, Gunther; Hoppe, Peter

PA Farbenfabriken Bayer Akt.-Ges.

DT Patent

LA Unavailable

FAN.CNT 1

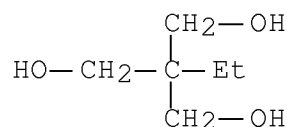
	PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
PI	DE 1097671		19610119	DE 1959-F28504	195905 23
				<--	
	GB 904789			GB	
	US 3138562		19640623	US 1960-31252	196005 20
				<--	

AB The foams were prepd. from branched polyesters with polyalkylene glycol radicals (mol. wt.  $\geq 400$  and the alkylene groups of which contained  $\geq 50\%$   $\geq 2$  C atoms) and of polyisocyanates, in the presence of water or low-boiling solvents. The polyesters also contained as cocondensates monomeric monobasic fatty acids. Thus, from tris(hydroxymethyl)propane 1370, adipic acid 292, phthalic anhydride 592, oleic acid 566, and propoxylated tris(hydroxymethyl)propane (OH no. 112, mol. wt. 1500) 620 parts was prepd., at  $195-200^\circ$  and under N or CO<sub>2</sub> in a conventional manner, a polyester (I) of acid no. 0, OH no. 235, and viscosity at  $50^\circ$  4000 cp. I (100 parts) mixed with an accelerator consisting of dimethylbenzylamine 1, 50% aq. sulfonated castor oil Na salt soln. 4, and hydroxylated polysiloxane 0.3 parts was foamed by the addn. of 84 parts tolylene diisocyanate. The resulting nonbrittle solid foam had a d. of 35 kg./cu. m., a tensile strength of 1.3 kg./sq. cm., an impact resistance of 0.33 kg./cm., a heat bending point of  $142^\circ$ , and a H<sub>2</sub>O absorbency of 0.4%.

IT 77-99-6, 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-  
(and polypropylene glycol derivs., polyesters and polyurethans from)

RN 77-99-6 HCA

CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



INCL 39B

CC 31 (Synthetic Resins and Plastics)

IT Porous materials

(from urethan polymers, from polyesters  
branched with polyalkylene glycol radicals)



IT 77-99-6, 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-  
(and polypropylene glycol derivs., polyesters and polyurethans  
from)